REPORT RESUMES

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THE IMPACT OF TITLE I, AN ASSESSMENT PROGRAM FOR NEW ENGLAND.
VOLUME 1, FINAL REPORT.
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DETAILED STATISTICAL AND PROCEDURAL INFORMATION IS PRESENTED ON (1) 1966 TITLE I PROJECTS IN NEW ENGLAND (INCLUDING PROJECTS OPERATED BY INSTITUTIONS FOR HANDICAPPED CHILDREN), (2) THE DISTRIBUTION AND EXPENDITURE OF TITLE I FUNDS, AND (3) DATA COLLECTING AND PROCESSING PROCEDURES FOR THE EVALUATION OF THE PROJECTS. IT IS FELT THAT THE OFFICE OF EDUCATION DATA COLLECTION FORM IS INADEQUATE FOR OBTAINING CERTAIN DATA NECESSARY FOR PROGRAM EVALUATION AND THAT THE EVALUATIVE INFORMATION SUBMITTED BY THE SCHOOLS IS ULTIMATELY UNRELIABLE. ALSO, INSTEAD OF COMBINING EVALUATION REPORTS FROM INDIVIDUAL PROJECTS, AS IS DONE IN THIS REPORT, A MORE RELIABLE EVALUATION METHOD WOULD BE TO SYSTEMATICALLY MEASURE A REPRESENTATIVE SAMPLE OF PROJECTS IN TERMS OF CERTAIN COMMON OBJECTIVES. AT PRESENT, BECAUSE THE STIPULATIONS FOR THE USE OF PROJECT FUNDS ARE AMBIGUOUS, NO SPECIFICALLY MEASURABLE GOALS HAVE BEEN ESTABLISHED WHICH ARE COMMON TO ALL PROJECTS. COMPUTER PROGRAMS FOR PROJECT DATA PROCESSING ARE APPENDED TO THIS REPORT, AND SUPPLEMENTARY STATISTICAL DATA ARE PRESENTED IN THREE SEPARATE VOLUMES. (LB)

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THE IMPACT OF TITLE I

AN ASSESSMENT PROGRAM FOR NEW ENGLAND

Volume I

Final Report

Contract No. OEC-1-6-000932-0932
New England Education Data Systems
Cambridge, Massachusetts
December, 1967

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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THE IMPACT OF TITLE I:

AN ASSESSMENT PROGRAM FOR NEW ENGLAND

Volume I

Final Report

Contract No. OEC-1-6-000932-0932
Bureau of Elementary and Secondary Education
under the provisions of The Elementary and
Secondary Education Act of 1965
United States Office of Education

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December, 1967

UD005 811

The evaluation reported herein was performed pursuant to a contract with the United States Department of Health, Education, and Welfare Office of Education.

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ACKNOWLEDGMENTS

While the contents of this report are the sole responsibility of the principal investigators, we would like to acknowledge several people who assisted the project staff in the conduct of the study and in the preparation of the final report. Without their contributions this report would not have been possible.

The Commissioners of Education of the six New England states gave us their invaluable cooperation and support. Within the state departments of education, we are particularly indebted to the six Title I coordinators: Dr. Alexander Plante, Connecticut; Mr. James Morrison, Maine; Mr. Robert Jeffries, Massachusetts; Mr. Paul Fillion, New Hampshire; Mr. Edward Costa, Rhode Island; and Mr. Walter Gallagher, Vermont. They and their staffs helped in providing the study with necessary data and with valuable information concerning the operation of Title I.

We are grateful to Mrs. Martha Manley who supervised the preparation of the Statistical Supplement. She not only selected and organized the material for these three volumes, but also provided the many graphs and charts that appear throughout this report.

We are also much indebted to Mrs. Lynne Ransom for her excellent work in typing and preparing the document in its final form. Her competence and her concern have been invaluable to this study.

Finally, we would like to thank the members of the NESDEC-NEEDS Publications Department, under the direction of Mrs. Linda Scovill, for their advice and assistance in the production of the report. We particularly thank Mr. Joseph McGuire and Mr. Robert McGuire for the care and attention that they gave to printing the extensive and often complicated material in these volumes.

Richard H. Goodman
Michael J. Wilson

A SUMMARY REPORT

THE IMPACT OF TITLE I: AN ASSESSMENT PROGRAM FOR NEW ENGLAND

(Contract No. OEC-1-6-000932-932)

New England Education Data Systems (NEEDS) has been engaged in a study of the impact of Title I of the *Elementary and Secondary Education Act of 1965*. The project was designed to operate in two stages and its principal objectives were

1. to examine the effects of Title I upon educational opportunities provided by local education agencies,
2. to assess policies and procedures for carrying out the intention of the legislation particularly in so far as they affect program evaluation, and
3. to explore possible models for Title I program evaluation which might be used on a representative sample of projects.

The first stage of the study is now completed. It has been concerned with drawing a regional picture of FY66 Title I activity in New England and with considering the issue of program evaluation. The second stage of the project is to refine and implement a plan for the intensive examination of a representative sample of Title I projects.

The findings of the current study are of two types, statistical and procedural. The populations used in the descriptive analysis are the FY66 New England Title I projects (N = 1306) and eligible local education agencies (N = 1180). Because Title I was a new program in 1965, there was no adequate documentation of the characteristics and educational needs of eligible communities, nor were there any precedents for determining the most significant variables affecting project activities or success. Consequently, a regional census was conducted to determine the distribution of projects, to identify those characteristics which seem to differentiate them, and to permit later selection of a stratified sample. The data used in the statistical analysis were drawn primarily from the FY66 Title I documents themselves - the basic data and application forms and the project fiscal and evaluation reports. Study of the comparable data for all New England projects has permitted the NEEDS project to document and examine the operation of the program. Because of its descriptive rather than evaluative nature, only a brief summary of the statistical findings is appropriate here. Chapters III through VI of the Final Report and the accompanying three volume Statistical Supplement contain full statistical elaboration of the New England Title I projects as reflected in the documents, reports, and questionnaires to which this project had access.

During FY66, 945 New England local education agencies (LEAs) conducted a total of 1306 individual Title I projects. Another 235 LEAs who were eligible for funds did not participate in the program. Nearly thirty-five million dollars was initially allocated to the six New England states; of this, 21.8 million or 63% was actually expended for project activities. Most of the Title I funds were spent in only two budget categories. "Instruction" (primarily teachers' salaries) and "Equipment" accounted for 59% and 22% of all expenditures, leaving the remaining 19% distributed among thirteen other possible budget categories. Most projects were conducted in rural communities (68%), but these projects were generally small both in budget and in enrollment. Metropolitan and suburban communities, on the other hand, operated fewer projects yet served 62% of the participating children and used 69% of the expended Title I funds. Generally, project differences among the states appeared to be largely a function of the community type compositions of the states rather than differences in statewide educational needs or policies concerning education. Regardless of state, projects in a given community type tended to be more similar to each other than to projects in other types of communities. Of the fourteen project type groups, the large "General Remedial" category accounted for 31% of the projects. The "Reading" group followed closely with 26%. The next largest project type group was "Language Arts" which accounted for 8% of the projects. None of the remaining eleven included more than 5% of the projects.

The findings regarding program procedures are more central to the focus of the NEEDS project not only because they have general implications for the improvement of the program's effectiveness, but more important to the conduct of the study, because they offer directives for the evaluation activities of Phase II. There are three major findings of this study concerning program procedures.

1. The current Title I data collection forms used by the United States Office of Education and by the states do not adequately provide the types of information necessary for a serious descriptive, let alone evaluative study of Title I. Because they are federally prescribed, the basic data and application forms supply certain common data for

all participants. Yet, the data requested are not always the most pertinent nor do the items consistently elicit the intended responses. The post-project evaluation reports are unfortunately even less informative. Because they are prepared individually by each state, they do not provide comparable data for regional analysis. Furthermore, much of the information they request is not related to the application form requests. Thus, there is little comparable information with which to document historically an individual project, let alone with which to make comparisons among projects.

2. Information reported by the schools is neither sufficient nor reliable for program evaluation. Schools by and large do not have the research capabilities to evaluate properly the success of their Title I projects. Only five percent *(5%) of the 1306 New England Title I projects supplied* adequate data or explicit quantitative reports on the evaluation of their projects. Others indicated results of objective testing in unusuable form. Most projects were not assessed objectively but instead relied on impressions and general feelings of faculty and staff.

3. As it is now operated, Title I of the *Elementary and Secondary Education Act of 1965* stands somewhere between providing categorical and general aid to local school

> systems. It offers categorical aid in that funds are provided for the education of a specific population of children. It provides general aid in that there are few project stipulations as to the use of funds. This ambiguity in policy sanctions such a wide variety of Title I sponsored activities that the goals common to all projects are too general to be operational for individual projects, and individual goals are too variious to permit evaluation of the total program's impact upon student behavior.

The implications of such findings are obvious. Whether or not a particular Title I project is sufficiently effective in improving the education of disadvantaged children and is thus worthy of the expense cannot be determined unless evaluation is systematic, objective, and above all else, properly performed. More importantly, however, the effectiveness of Title I as a program cannot be measured by combining the results of individually evaluated projects, no matter how validly such evaluation is conducted at the local level. To assess the program's impact, a representative sample of projects should be studied. These projects should be measured systematically in terms of some common objectives. Their differences and similarities should be carefully documented, and the instruments used for data collection and measurement should be both compatible and properly administered. It is in this way that the degree of project and program success can be reliably evaluated and the variables contributing to success can be identified.

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CHAPTER I

AN INTRODUCTION TO THE NEEDS STUDY

I.1 THE CONTEXT OF THE REGIONAL STUDY

Title I of the *Elementary and Secondary Education Act of 1965* (ESEA) calls for distribution of Federal funds to aid local educational agencies in providing for the education of children of low-income families and makes the following declaration of policy:

> Sec. 201. In recognition of the special educational needs of children of low-income families and the impact that concentrations of low-income families have on the ability of local educational agencies to support adequate educational programs, the Congress hereby declares it to be the policy of the United States to provide financial assistance (as set forth in this title) to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means (including pre-school programs) which contribute particularly to meeting the special educational needs of educationally deprived children.

The Act stipulates that the educational programs financed under Title I be evaluated at local, state, and national levels to determine their effectiveness in meeting the goals of the legislation. The agencies required by the law to perform such evaluation are: (1) the local education agencies, (2) the state departments of education. (3) The United States Office of Education, and (4) the National Advisory Council on the Education of Disadvantaged Youth. Local education agencies submit Title I project evaluation reports to their respective state departments of education to provide information on individual project activities. The state education agencies in turn report to the United States Office of Education (USOE) on statewide Title I operations, basing their reports on evaluation conducted through the state Title I offices, as well as on the information supplied by the local educational agencies. The USOE then provides Congress and the President with a national evaluation of the Title I program. In addition, the National Advisory Council on the Education of Disadvantaged Youth conducts a national assessment of Title I and presents its independent appraisal of the program directly to Congress.

In addition to the evaluation framework outlined in the Act itself, the USOE has contracted with several independent agencies to examine particular aspects of Title I. These studies were initiated to contribute to a more comprehensive picture of the program in operation and to explore the feasibility of a variety of approaches to its evaluation. Among these contracted projects were evaluation studies at the city, state, and regional level.

A regional evaluation would of necessity be conducted from a different perspective than either a local or state study. Since the

Title I program is administered primarily through the state education agencies, a regional study would be confronted with differences in state procedures regarding Title I as well as with more pervasive differences in policy, organization, administration, and fiscal support of education among several states. In this respect, the task of conducting a regional study of the impact of Title I is a microcosm of the task of the USOE.

In May, 1966, the USOE issued a contract to the New England Education Data Systems to conduct a regional study titled *The Impact of Title I: An Assessment Program for New England.* New England was a logical location for such a regional study. It includes six states within a small area. It contains extremes in community characteristics ranging from urban Boston to rural unincorporated districts in northern Maine. It contains high-income suburbs (especially in the southern three states), the depressed Merrimack River Valley, non-English speaking immigrants from Quebec, and Negro ghettos in its larger cities. An examination of New England touches upon many community characteristics and educational needs likely to be typical of other parts of the country as well.

1.2 THE NESDEC-NEEDS ORGANIZATION

The NESDEC-NEEDS organization was an appropriate agency to conduct such a study. The New England School Development Council (NESDEC) is a non-profit educational association with a current membership of three hundred school systems and other educational institutions in the New England area. The organization was started in 1945 by a member of the Harvard faculty and a group of New England school superintendents for the purpose of promoting research in and evaluation and dissemination of superior educational practices. NESDEC has since sponsored dozens of research, developmental, evaluative, and dissemination activities toward this end. The organization is controlled by an elected committee of New England public school superintendents. The 1967-68 committee consists of the following members:

NESDEC Executive Committee

Alfred A. Maffeo, Natick, Massachusetts	Chairman
Hilton C. Holland, Rockingham, Vermont	Vice-Chairman
John B. Chaffee, Wellesley, Massachusetts	Clerk
E. Davis Woodbury, Milton, Massachusetts	Treasurer
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Richard H. Goodman, NESDEC	Executive Secretary
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Charles Ritch, Jr., North Haven, Connecticut	
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John A. Frietas, Hartford, Vermont	
Ian D. Malcolm, Barrington, Rhode Island	
Hugh Watson, Glastonbury, Connecticut	
Thomas H. White, Dalton, Massachusetts	
R. Douglas Dopp, Old Saybrook, Connecticut	
Joseph H. Gibbons, Stoughton, Massachusetts	
Harry Merson, Falmouth, Massachusetts	
William G. Zimmerman, Jr., Hanover, New Hampshire	

One of the major projects of NESDEC is the New England Education Data Systems (NEEDS), started in 1960 in cooperation with the Harvard Graduate School of Education and the Newton, Massachusetts, Public Schools. NEEDS was the first regional non-profit educational data processing organization in the country and holds the unique position of having both a strong affiliation with the university academic and research community and with the sixty-five member school systems for which it provides both data processing and research services. In addition to public school systems, the NEEDS membership includes selected universities in New England and the six State Departments of Education. All three groups are represented on the current Board of Directors:

NEEDS Board of Directors

Richard H. Goodman, Chairman
Executive Secretary, New England School Development Council

John B. Chaffee, Clerk
Superintendent of Schools, Wellesley, Massachusetts

E. Davis Woodbury, Treasurer
Superintendent of Schools, Milton, Massachusetts

Alfred A. Maffeo, Chairman of the NESDEC Executive Committee
Superintendent of Schools, Natick, Massachusetts

Dwight Allen
Chairman, Education Department
University of Massachusetts

Charles E. Brown
Superintendent of Schools
Newton, Massachusetts

John B. Carroll
Senior Research Psychologist, Educational Testing Services
Princeton, New Jersey

William H. Curtis
Superintendent of Schools
Manchester, Connecticut

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Principal, Branford High School
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Owen B. Kiernan
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Roland B. Kimball
Professor, School of Education
University of New Hampshire

Thomas E. Kurtz
Director, Kiewit Computation Center
Dartmouth College

Monsignor Francis J. Lally
Editor, *The Pilot*
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Commissioner of Education
The State of Rhode Island

Theodore R. Sizer
Dean, Graduate School of Education
Harvard University

Lawrence M. Stolurow
Director, Computer Assisted Instruction Laboratory
Harvard University

David V. Tiedeman
Professor, Graduate School of Education
Harvard University

The organizational structure of the New England Education Data Systems offers unusual advantages for the data collection as well as the data analysis relevant to performing a regional study such as the Title I assessment. Its membership provides NEEDS with direct contact with local education agencies. Through services to its member systems, NEEDS has had extensive experience in file creation and maintenance, systems development and testing, educational data processing, and the attendant software. It is also able to handle statistical analyses of large amounts of data ranging from state aid computations and school population projections to content analysis and multivariate analysis of pupil data.

Secondly, because NEEDS is directed by its member institutions, the six New England state departments of education, as NEEDS members, are "co-owners" of the system. A six-member committee composed of state department personnel concerned with data collection and processing in each state acts as an advisory group to NEEDS on behalf of the various commissioners of education. Members of this committee have assisted in the current Title I project both by reviewing project plans and by providing NEEDS with introductions to the state Title I departments.

Finally, its relationship with Harvard University, especially with the Graduate School of Education and the Harvard Computing Center, provides NEEDS with added professional and research staff and with the extensive computer facilities of the university whenever these are necessary to augment its own resources.

1.3 OBJECTIVES AND SCOPE

The purpose of the NEEDS study has been to assess the first year operation of the Title I program in New England. Toward this end, project activities have focused both on examining the impact of the Title I program on educational opportunities provided by local education agencies and on developing a possible model for program evaluation. These concerns have also resulted in certain recommendations regarding policies and procedures for carrying out the legislation.

The project was designed to operate in two stages. The first stage, and the subject of the current report, has been concerned with relevant data on all eligible local education agencies (LEAs) and on all projects conducted in New England during FY66. The second stage of the project is to include an intensive examination of a representative sample of the Title I projects.

Because Title I was a new program in 1965-66, there was no adequate documentation of the characteristics and educational needs of eligible communities, nor was there any precedent for determining the most significant variables affecting project success. A regional census was therefore a necessary first stage activity, prerequisite to the selection of a stratified sample in the second stage. Information gathered for the first stage has allowed us to examine the distribution of projects and those community and project characteristics which seem most meaningfully different. Before beginning the data collection, we anticipated problems in data availability - problems internal to individual Title I documents, and problems in gathering comparable information from all six states. By surveying the region we were able to identify the extent of these difficulties and to determine what critical data for the sample study would have to be obtained directly from the LEAs rather than from the Title I documents or state records. The resultant data not only provide an overview of FY66 activities and the necessary framework for the sample selection, but also can serve as baseline data documenting the first year of Title I for future in-depth and longitudinal studies.

This four volume document is the final report of the results of the project's first stage. Volume I organizes the findings in three ways. First, it presents a statistical picture of Title I activities in New England during FY66, based upon concrete data. Secondly, it offers recommendations for the general operation of the Title I program. Finally, it considers a plan for evaluation. In addition, discussion of the procedures used in the study is included as Chapter II. This section was developed in such detail because many of the difficulties encountered in locating and analyzing suitable data have had implications for the rest of the report; they affect the information presented in Chapters III through VI and form the bases for some of the recommendations in the subsequent chapters. Volume I also includes an appendix explaining the computer programs used in the data analysis. Volumes II, III, and IV are the Statistical Supplements; they present detailed statistical information, primarily in the form of computer output display, on FY66 Title I activities in New England.

CHAPTER II

PROCEDURES

II.1 SOURCES OF DATA

To carry out the project objectives it was first necessary to stipulate the specific information which would contribute to the following three areas of concern:

1. description of Title I project activities throughout New England.
2. documentation of first year activities to serve as a reference for subsequent sample selection.
3. development of a programmatic evaluation model which could be later applied to a representative regional or national sample.

The next task was to determine the sources and availability of the data needed. Given the current scope of the project and the necessity for comparable data on all FY66 projects and participant LEAs, there were three potential sources of data:

1. Information gathered *directly* from individual LEAs conducting Title I projects.

2. Information provided by state reports.
3. Information provided summarily by all LEAs in Title I-related documents.

The first source of data was rejected for several reasons. Gathering information directly from the LEAs would have required administering questionnaires and conducting on-site visits to numerous Title I projects. At this point, there were not adequate bases upon which to draw an accurate sample. On the other hand, to collect data directly from all projects in New England would have far exceeded the time and fiscal limitations of the current project. In addition, such a massive data collection program was considered by the state Title I offices as to be an unnecessary imposition on LEAs who were already burdened with requests for data. Then, too, the NEEDS contract itself did not begin until most FY66 projects were already nearing completion. This source of data was therefore rejected as being unfeasible.

The project had hoped to collect environmental data on school systems and communities from state-compiled publications and reports. Although some uniform information on school organization, enrollment, per pupil expenditures, and Title I allocations was available for all six states, this second source of data was, on the whole, rather unfruitful. Review of reports from the six state departments of education, publications of the state teacher associations and information from state departments of commerce and statistics as well as United States census data indicated that much potentially relevant data --- such as teacher-pupil ratios, expenditure data, statewide testing results, demographic data --- were, in fact, impossible to use with precision. The six states do not always collect comparable data; when they do, the information is often not for the same years.

Difficulties in obtaining adequate information therefore forced the project to abandon certain types of data that would have been potnetially relevant to a thorough evaluation of Title I activities and to restrict itself to those sources that provided available and comparable information on all projects and participating LEAs in the region. As a result, most of the data for the NEEDS study were drawn from the four Title I-related documents themselves:

1. Basic Data form (Part I of the application)
2. Project applications
3. Final fiscal reports on individual projects
4. Post-project evaluation reports submitted by LEAs

Even before the information supplied by LEAs on these forms was examined, there were obvious limitations inherent in relying heavily upon Title I documents.

1. The information obtained would be only as accurate as the LEAs themselves chose to be in reporting on their communities and projects.
2. The documents themselves request information in highly summarized form so that responses to some items would be too general to be meaningful.
3. Information requested on the application forms was often not followed by similar requests in evaluation

reports so that certain comparisons between proposed and actual activity would be impossible.

4. Inconsistencies in the evaluation forms used from state to state would further limit the data.

Theoretically, the basic data and application forms presented no initial problems in uniformity because both were Federally issued. The final fiscal reports, although designed differently by the individual states, requested similar data and were easily made uniform. The outstanding exception was that one state requested each LEA to submit a single fiscal report summarizing all Title I expenditures rather than separately reporting individual project expenditures. The major discrepancies were in post-project evaluation forms which were prepared separately be each state for its internal use. Here arises one of the difficulties in conducting an inter-state study. While the states devised their evaluation forms with an eye to transmitting the information received from the LEAs to the USOE according to the standard USOE state report format, the six state forms are not comparable. Five states required each LEA to prepare a separate evaluation report on each project; one prescribed only one report form in which an LEA was to report on all its Title I projects collectively. The specific items of information requested differ so greatly that there were only a few important items answered by LEAs from all six states. Comparable objective test data on pupil achievement, for example, could not be expected from all states, nor could careful accounts of numbers of staff participating in projects. Slight differences in wording of questions of similar intent suggested that there would be further inconsistencies in the answers actually provided. Finally, the reports as a whole did not request specific details on project activities. None of them, for example, calls for a careful account of staff or pupil time spent in Title I activities.

Although much desirable information was not provided in the available sources, for the purposes of the first year's analysis these limitations had to be accepted. The following categories and sources of data were finally selected:

1. Basic information on all LEAs eligible for FY66 Title I funds.

   Sources of data:

   a. Title I basic data forms
   b. *Standard Metropolitan Statistical Areas, 1964*
   c. USOE classification system for LEAs
   d. United States census reports
   e. State Title I Office data on allocations for FY66
   f. State department of education information on school organization, enrollment, and expenditure

2. Title I Project Plans

   Source of data:

   a. FY66 Title I application forms

3. Post-Project Results

   Sources of data:

   a. Final Title I fiscal reports
   b. Final Title I evaluation reports

II.2 DATA COLLECTION

Preliminary data collection was begun in the early summer of 1966 in order to survey the potential sources of information. State reports were obtained from various agencies of the six state governments and the formats of the several Title I documents were acquired from the state Title I Offices and the United States Office of Education. Review of these materials contributed to the determination of suitable and available data and to the decision to rely primarily upon the Title I forms themselves.

The first step in the collection of specific data on projects and communities was to secure the cooperation of the six state departments of education, particularly of the state Title I offices. It was evident from the beginning that their support would be crucial to the project because of their direct relationship with the local education agencies and because of the aid they could provide in obtaining the necessary data. The NEEDS state department coordinators assisted NEEDS-State Department communication. During the initial months of the project, the staff met with members of the state Title I offices to inform them of the intent of the project. On August 11-12, 1966, the NEEDS project sponsored a two-day conference for representatives of the state Title I offices, the NEEDS state department coordinators and other members of the state departments to explain the project goals and procedures and to obtain cooperation in solidfying project plans. There were several valuable outcomes of this conference. Further sources of data were suggested by state department staff, and internal state department procedures for handling the Title I program were clarified for the NEEDS staff. The six state departments agreed to make available to the NEEDS project all materials and documents in the state files relating to Title I. This cooperation was predicated upon the agreement that NEEDS staff would not at this time gather data directly from local education agencies. The state departments were particularly concerned that the already over-burdened LEAs not receive additional direct requests for information from evaluation organizations.

Soon after the August conference, the NEEDS staff began collection of the four Title I documents. It was necessary to obtain complete copies of all documents so that the information could be converted at NEEDS into machine readable form for processing and analysis. Whenever possible, the states provided NEEDS with their extra copies of the documents. In most cases, however, the state Title I offices did not have sufficient copies to relinquish the originals, so duplicate copies had to be made for project use directly from the state office files. This copying was done by project staff and by personnel in the state departments hired temporarily for this work by NEEDS.

The data collection was done in three stages:

1. The FY66 Basic Data and Application forms were available in the summer of 1966; these were therefore the first documents to be obtained from the states.
2. Evaluation forms for FY66 projects were not submitted by the LEAs until October, 1966, so the collection of these documents

was conducted during the late fall. Some states were using the NEEDS data processing facilities to process their forms for the state report to the USOE, so for these states the forms were at NEEDS by October 30, 1966. For the remaining states, the collection was completed after the Title I offices had completed their own analysis of the forms.

3. The FY66 fiscal reports were to be submitted to the states in the late fall of 1966, but because some LEAs were late in completing these reports, the NEEDS collection was not finished until February, 1967.

II.3 DATA PREPARATION

As the material was obtained from the states, it was reviewed, catalogued, and coded at NEEDS and prepared for machine processing. The principal activities involved in preparing the data for analysis were:

1. Developing a cross-coding system for the four forms so that complete information could be retrieved for LEAs and for projects.
2. Determining appropriate coding systems for individual data items from each of the documents.
3. Resolving errors and inadequacies in responses.
4. Resolving inconsistencies in the forms themselves.
5. Coding the data for key-punching and digitek scoring.
6. Transferring data to master magnetic tapes.

Close examination of the completed forms revealed further inadequacies in the data which were not evident from the earlier review of the blank formats. Inconsistencies in the data now stemmed from inaccurate or sparse presentation of the requested information and from LEA misinterpretation of the intent of some of the requests. The most serious limitation however was in the lack of objective test data on student achievement. In most cases this lack seemed a reflection of the inadequacy of evaluation procedures used on the local level than of the reporting forms. The extent to which the results of our analysis must be qualified because of poor or incomplete data is explained in detail in the chapters on data analysis.

II.4 THE POPULATION

The analysis was planned to include all FY66 Title I projects and all participant local education agencies in New England. The number of projects actually used in the NEEDS study is based upon the approved project applications supplied by the state Title I offices. The number of LEAs involved is the number of LEAs for which we received Basic Data forms. Our total numbers of projects and participant LEAs turned out to be slightly smaller than the totals reported in the state evaluation reports to the USOE. The discrepancies in both cases, however, represent less than 1% of the states' totals.

Greater variance occurs in the numbers of project evlauation and final fiscal reports. From the state offices the NEEDS study received application forms from 1302 projects, evaluation reports on 1306 projects and final fiscal reports on 1276 projects.

In many cases, even when the appropriate form was submitted by an LEA or project, individual items were left unanswered. This variation in response rate further diminishes the size of the sample contributing answers to specific items on the forms. To account for missing data, a tally was kept of the number responding to each item as well as the total number who could have responded. For analyses that involved comparing project plans with actual results, only those projects providing sufficient data were included in the calculations.

II.5 CLASSIFICATION AND CODING SYSTEMS

Two major variables in the NEEDS analysis were the community types involved in Title I project and the types of projects conducted. For both of these variables, detailed coding systems were devised and all projects and communities were placed in appropriate categories. In addition, a system was developed to classify the activities used in implementing the projects. Because these variables are used frequently in the analysis, some explanation of the meaning of the coding systems is included.

II.5.1 Community Types

To examine local education agencies and projects in terms of characteristics of the communities they serve, a classification system was devised to provide a more meaningful index of geographic, population, and employment characteristics than simply an urban-rural differentiation. The five community type groups used in the NEEDS project are derived from two documents; the statistical groupings outlined in the Bureau of the Budget publication, *Standard Metropolitan Statistical Areas, 1964*, issued by the U.S. Office of Statistical Standards, and the *Special Instructions for Classification Analysis*, prepared by the United States Office of Education, Division of Elementary and Secondary Education and found as the Appendix to the FY66 Title I state evaluation report forms.

The definition of Standard Metropolitan Statistical Areas, established on the basis of the 1960 census by the Bureau of the Budget, offers a uniform guide to standard metropolitan boundaries for federal agencies publishing statistical data. The classification differentiates those areas, cities, towns and counties which are considered metropolitan in character from those which are not. The criteria used to make differentiations among communities include population, population density and employment patterns. The Bureau of the Budget handbook stipulates the 219 metropolitan statistical areas in the United States and for each area lists the core city or cities and the counties (and in the case of New England the specific cities and towns) considered to be within a given metropolitan area.

The United States Office of Education has developed a classification system, based upon the Standard Metropolitan Statistical Areas, which is designed for local education agencies rather than municipal units. This system outlines five LEA groupings, three within metropolitan areas and two in non-metropolitan areas.

For the purposes of the NEEDS study, the USOE system was reinterpreted to permit assignment of community types both to LEAs and to projects themselves. This flexibility was necessary since we were interested in examining the data both from the point of view of the LEAs eligible for Title I funds and from the point of view of the total population area served by individual projects. In the case of cooperative projects operated by two or more LEAs, the combined area of all LEAs involved became the criterion for community-type of the project. As a result, according to this study's classification system, a project could well be serving a base population large enough to assign it a different community type than that of any of its component LEAs. Cooperative projects were most prevalent among rural LEAs. In metropolitan areas this situation was less frequent; projects were usually designed to serve only one LEA and therefore assumed the community type of that LEA. For ease in discussion, the five community types are referred to as "SMSAs" throughout this report. Strictly speaking, however, the Bureau of the Budget system uses the "SMSA" abbreviation to refer only to a metropolitan area. The following five community types were those used in this study:

COMMUNITY TYPE CLASSIFICATIONS

SMSA Type 1:

The largest "core city" in a metropolitan area and the city from which the SMSA draws its name. In the case of twin or tri-city areas, such as the "Springfield-Chicopee-Holyoke, Massachusetts-Connecticut" area, all cities included in the metropolitan area name were assigned to Type 1. In all cases, the "core city" was also an LEA.

SMSA Type 2:

All other units (cities, towns, unincorporated areas, and LEAs) within the metropolitan area with populations of 50,000 or more. The "Older Secondary City" provision of the USOE has been eliminated.

SMSA Type 3:

All other units within the metropolitan area with populations of fewer than 50,000.

SMSA Type 4:

SMSA Type 4:

All units outside the metropolitan area with populations between 2,500 and 49,999.

SMSA Type 5:

All units outside a metropolitan area with populations under 2,500.

II.5.2 Project Type Classifications

The Title I data was also analyzed according to types of projects. The project types themselves are indicative of the areas of deprivation identified by participating communities. The isolation of project types by implication isolates what the LEAs considered to be their major areas of need - or at least those areas in which LEAs determined it most reasonable to expend efforts - given the contraints of time, staff, and the financial resources.

All Title I projects in New England were classified into one of sixty-seven (67) specific project type groups according to what appeared from the data to be the major activity or subject matter focus on the projects. These sixty-seven specific areas of project activity are sub-types of fourteen (14) broader more manageable categories which are the basis of most of the analyses. Unless otherwise stated, the references to "project type" in this report refer to these fourteen major groupings. There are some instances, however, when more specific distinctions among types of project activities are made on the basis of the specific groupings. These are referred to in the analysis as "specific project types."

project activities are made on the basis of the specific groupings. These

The following list indicates the fourteen major project types and the distribution of the specific project types.

MAJOR CATEGORIES OF PROJECT TYPES

1. ACADEMIC INSTRUCTION:

Foreign Languages
Mathematics
Science
Social Studies
Curriculum Development

This group includes all those projects whose remedial thrust was clearly in one academic area or in curriculum development activity. Reading and language arts have been made into two independent categories rather than included in "Academic Instruction." The large numbers of projects specifically in these areas indicated their importance to the LEAs and it therefore seemed valuable to separate these projects from other academically focused projects.

2. READING:

Remedial Reading
Developmental
Reading Readiness

3. LANGUAGE ARTS:

English Language Arts
English as a Second Language
Language Arts - Remedial Reading (combined)
Speech Therapy

4. INSTRUCTIONAL SERVICES:

4. INSTRUCTIONAL SERVICES:

Reduction of Class Size
Additional Staff
Small Group Instruction
Teacher Aides
Other Sub-professional Help
Tutoring
Individualized Instruction

This category was necessary for classifying those projects which did not specify a particular subject or activity area but rather emphasized staff and student grouping patterns. Projects were assigned to subdivisions within this category only when no more specific area of activity was evident. Generally, in projects stipulating their remedial focus more clearly, the activities in this category were considered implementing activities rather than project types.

5. GENERAL REMEDIAL:

Summer School
General Remedial
Drop-outs
Absenteeism

A "General Remedial" category was created because of insufficient data and because of the varying degrees of specificity in the LEA descriptions of their projects. A number of projects lacked one particular focus but reported the project aim as "remedial instruction," "remediation," or "compensatory education" and proceded to offer a number of diverse activities toward these ends. Since ESEA Title I legislation was designed to provide for compensatory educational programs, compensatory education is assumed to be a concern of all projects but is relatively useless as the operational objective of a particular project.

6. VOCATIONAL:

Business and Office
Home Economics
Industrial Arts
Work-Study

7. SPECIAL CLASSES:

Special Education
Mentally Retarded
Emotionally Disturbed
Hard of Hearing
Physically Handicapped
Slow Learners
Special Classes
Gifted
Adult Education

Gifted
Adult Education

8. SCHOOL READINESS:

Pre-School
Pre-Kindergarten
Kindergarten
School Readiness Programs

9. MATERIALS AND EQUIPMENT:

Curriculum Materials
Equipment
Audio-Visual
Additional Classroom Space

10. GUIDANCE AND PSYCHOLOGICAL SERVICES:

Testing and Research
Diagnosis
Psychiatric
Psychological
Social Work
Home-School Visiting
Guidance and Counseling
Counseling, Psych., Social

11. NON-ACADEMIC SERVICES TO PUPILS:

Physical Education
Food Services
Clothing
Waiver or Provisions of Fees for Books, etc.
Health Services
Dental
Eye
Hearing
Transportation

12. LIBRARY:

Library Activities

13. NON-ACADEMIC ENRICHMENT ACTIVITIES:

Art
Cultural Enrichment
Music
Recreation

14. IN-SERVICE TRAINING:

14. IN-SERVICE TRAINING:

In-service Training

II.5.3 Implementation Activities

The analysis also includes some investigation of the ways in which projects were conducted --- that is, of the activities used to implement the projects. Projects of the same project type used differing approaches. Reading projects, for example, may have utilized individualized instruction and teacher aides as the principle implementation activities; or they may have purchased special equipment and materials to be used for small-group instruction. Unfortunately, the source data was generally no more detailed than this; it is not possible to compare specific materials used, equipment purchased, or the frequency of individualized instruction. Yet, these activities do provide additional data about the projects. While the project type stipulates the area of remedial need, the implementation activities represent the LEA's means of meeting these needs. The need for remedial reading instruction is illustrated by the decision to utilize Title I money in a remedial reading project and thus, remedial reading becomes the project type. The operation of the project may include small group instruction and/or the acquisition of necessary equipment for reading instruction; these become "implementation activities."

instruction and/or the acquisition of necessary equipment for reading instruction; these become "implementation activities."

Each project was assigned as many implementation activities as the project descriptions indicated were appropriate. Again, because of the varying degrees of specificity in the source data, there are limitations in this approach. The project type categories and the implementation activity categories are not discrete groups. What was the major focus for one project was often an implementation activity for a less narrowly defined project. For some projects, for example, "Remedial Reading" is considered the specific project type with teacher aides and new materials considered as implementation activities. For other projects, "Remedial Reading" is only one of several implementation activities in a multi-purpose program which could only be given the project type classification of "General Remedial." Still other projects stipulated a specific area of concern but gave no indication of how the project was to be conducted. When, for example, a project was described as being "designed to improve reading deficiencies of 25 third grade children in the project school" and there was no sufficient additional information on the execution of the project, the project was assigned "Remedial Reading" as both project type and implementation activity.

Most projects, however, provided more explicit information and included a variety of activities. A typical project application, for example, could have contained the following description. "This project is to provide cultural enrichment to children through a summer school program with field trips and individualized instruction in art, music, and social studies. One guidance counselor will be added to the staff."

and social studies. One guidance counselor will be added to the staff."

This project would be typed "Cultural Enrichment" with "Individualized Instruction," "Guidance and Counseling," "Music," "Social Studies, " and "Field Trips" as its multiple activities.

The implementation activity types include most of those areas listed as subcategories of project types but in addition include the following:

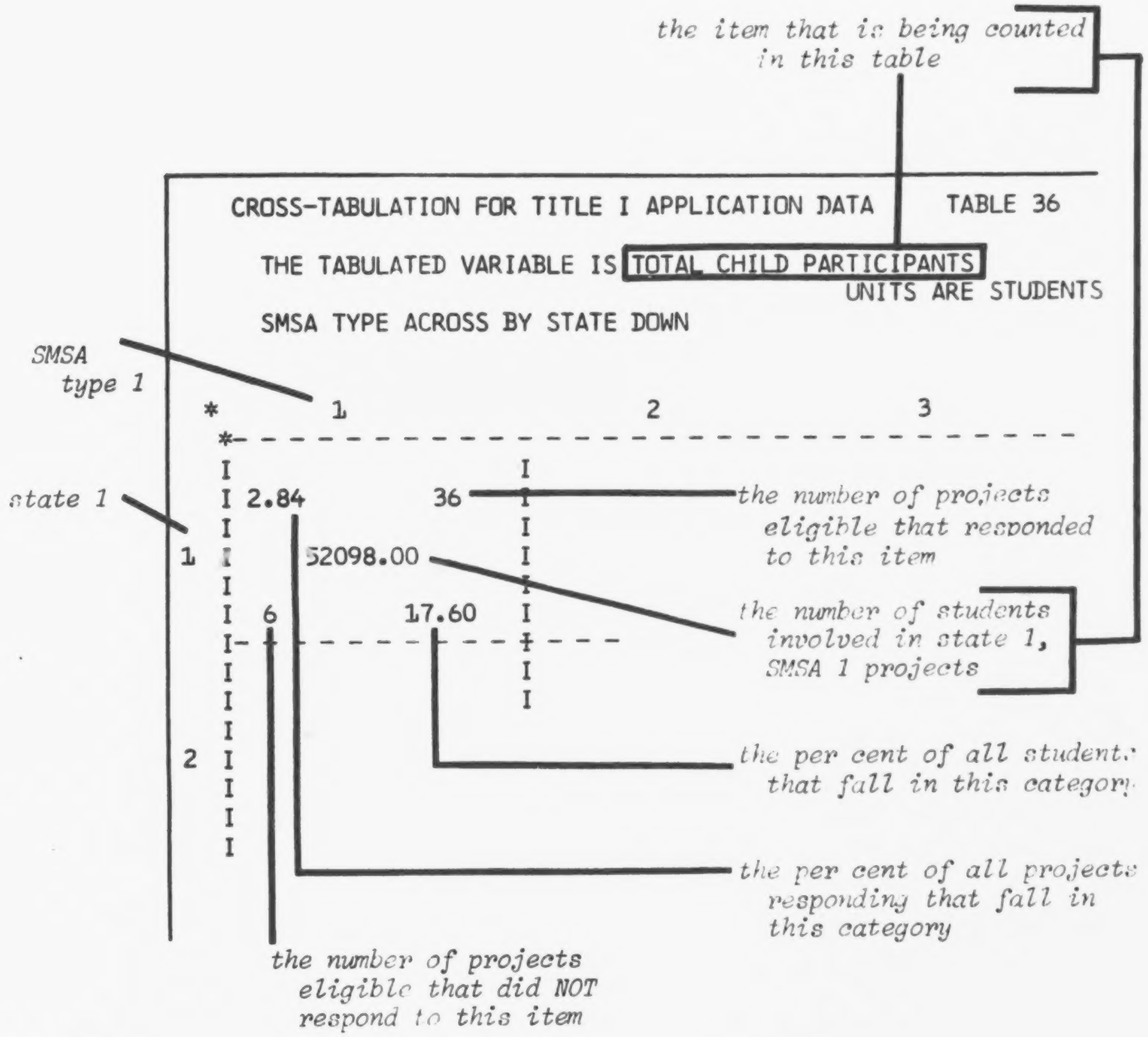
- Field Trips
- Camp
- Pre-School (For those LEAs not operating Kindergartens, "Pre-School" may indicate Title I-supported Kindergarten.)
- Pre-Kindergarten
- Kindergarten
- Breakfast food service
- Lunch food service
- Other food services
- Special classes
- Additional teaching staff
- Other sub-professional help
- Tutoring
- Research and Testing (used to indicate that diagnostic testing was a major activity rather than to indicate more routine evaluation or progress testing.)
- School Nurse
- Mobile Units
- After school study centers
- Make-up facilities
- Attendance services

II.5.4 Reading the Tables

Chapters III through VI contain graphs and tables illustrating the discussion. These are on colored pages and have summaries of the major variable codes printed on the reverse sides. In addition, some detailed breakdowns are presented in computer out-put displays. An explanation of how to read these displays is presented on page 31, Figure II.1.

Detailed descriptions of the computer programs (including the output routines) used in the analysis of the data are presented in the Appendix to the Final Report, Volume I. Also included there are listings of those subroutines most frequently used for output cross tabulations.

FIG. II.1 HOW TO READ THE TABLES: AN EXAMPLE



the item that is being counted in this table
CROSS-TABULATION FOR TITLE I APPLICATION DATA
TABLE 36
THE TABULATED VARIABLE IS TOTAL CHILD PARTICIPANTS
UNITS ARE STUDENTS
SMSA TYPE ACROSS BY STATE DOWN
SMSA type 1
1
2
3
state 1
2.84
36
52098.00
6
17.60
1
2
the number of projects eligible that responded to this item
the number of students involved in state 1, SMSA 1 projects
the per cent of all students that fall in this category
the per cent of all projects responding that fall in this category
the number of projects eligible that did NOT respond to this item

It should also be noted that summary totals for each row and each column are included on the table. These include the same items that are found in each individual cell. In addition, the mean, standard deviation and range have been calculated for the rows and columns.

Summary information for the entire table is presented in the upper right-hand corner. This includes the total number of responses to the item, the number that did not respond, the total for the item being counted in the table (in the example above, the child participants), the mean, standard deviation and range for the totals.

CHAPTER III

FINDINGS: THE DISTRIBUTION OF FY66 TITLE I FUNDS

This chapter examines the New England distribution of the FY66 Title I funds. The data on the amount allocated to the states by Congressional appropriation were provided by state and Federal documents. Information on the distribution of these initial state allocations to individual local education agencies was drawn from state records and from basic data forms filed by the LEAs. The amount approved for specific projects was taken from project applications. The distinction between funds "allocated" and funds "approved" should be kept in mind. "Allocated" funds are those constituting the maximum basic grants offered to LEAs; the "approved" funds are those actually awarded to the LEAs for operation of approved Title I projects. The NEEDS study obtained data for ninety-eight (98%) of the New England population of LEAs eligible for Title I funds. The figures generally used in this study's analyses are therefore slightly smaller than those published in state reports.

III.1 ALLOCATIONS TO THE STATES

During FY66, a total of $35,323,329 was designated for the New England states under ESEA Title I. Most of this money was allocated to local education agencies in the form of maximum basic grants. The LEAs were then required to submit project proposals and budgets to the state departments of education for approval in order to actually receive part or all of their allocations. The size of an LEA's basic grant was determined by multiplying half of the 1963-64 state average expenditure per pupil by the number of "educationally deprived" children residing within the LEA. The "educationally deprived" child was defined in FY66 as any child between the ages of five and seventeen whose total family annual income was under $2,000 or whose family income exceeded $2,000 because of Aid to Families with Dependent Children (AFDC) payments under Title IV of the Social Security Act. The income data was based upon the 1960 United States census, AFDC data upon 1962 records. The upper and lower limits of the basic grant size were restricted. No LEA could receive a grant larger than thirty percent (30%) of its FY66 school budget for current expenditures, nor could an LEA serving an area with fewer than 100 qualifying children be eligible unless these children constituted at least 3% of the LEA's total resident children between the ages of five and seventeen. In addition, any LEA having

TABLE III.1 FY66 TITLE I ALLOCATIONS

STATE	FY66 TITLE I ALLOCATION TO LEAS	FY66 TITLE I ALLOCATION TO SEAS	TOTAL FY66 ALLOCATION	PERCENT OF N.E. ALLOCATION
Connecticut	$ 7,196,504	$ 71,965	$ 7,268,469	20.6%
Maine	4,014,213	40,142	4,054,355	11.5
Massachusetts	16,539,689	165,397	16,705,086	47.3
New Hampshire	1,452,253	14,523	1,466,776	4.2
Rhode Island	4,039,555	40,396	4,079,951	11.5
Vermont	1,731,378	17,314	1,748,692	4.9
New England Total	$34,973,592	$349,737	$35,323,329*	100.0%

* 3.0% of FY66 national allocation

FIG. III.1 TOTAL ALLOCATIONS

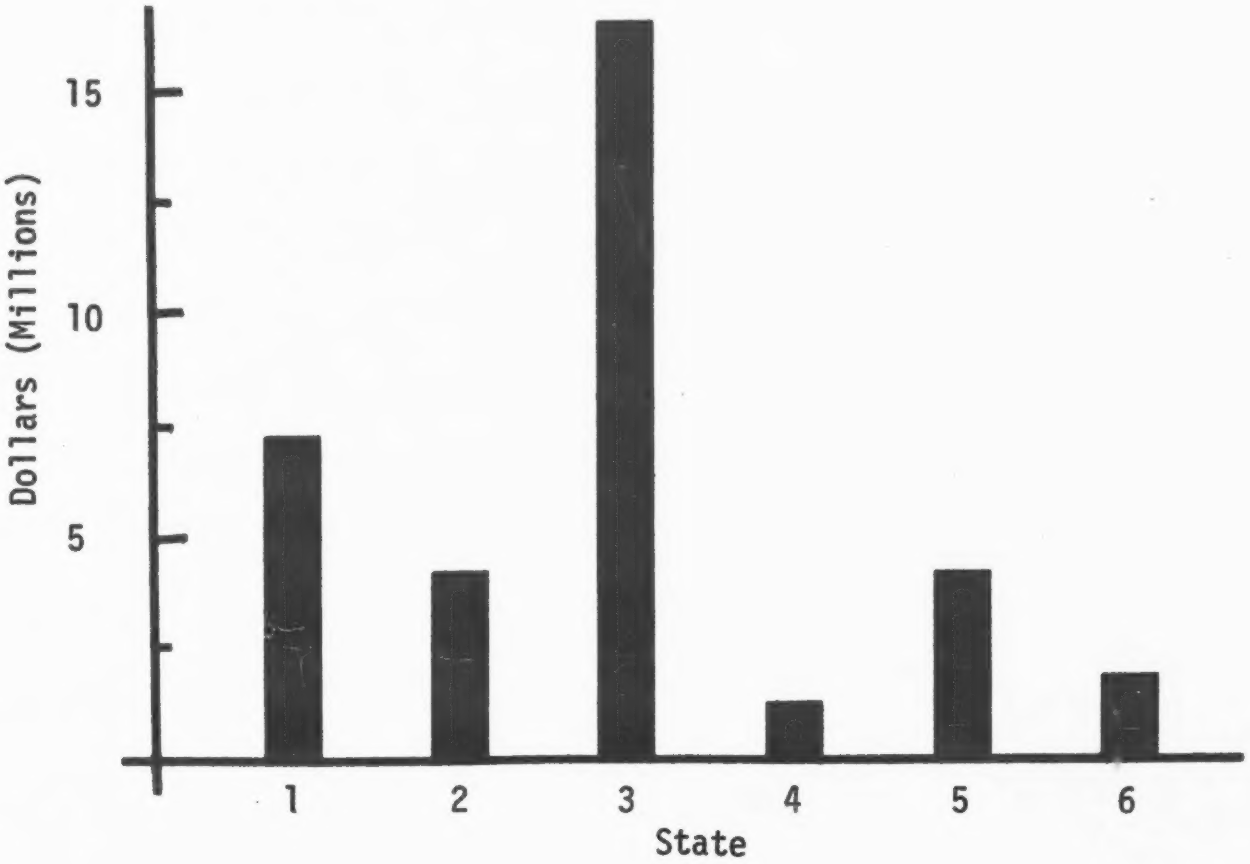


TABLE III.2 PERCENTAGES OF ELIGIBLE LEAS IN NEW ENGLAND BY STATE

STATE	TOTAL NO. OF LEAS	PERCENT OF N.E. TOTAL	LEAS ELIGIBLE	PERCENT OF STATE'S LEAS ELIGIBLE	PERCENT OF ELIGIBLE LEAS IN N.E.	LEAS NOT ELIGIBLE	PERCENT OF STATE's LEAS INELIGIBLE	PERCENT OF INELIGIBLE LEAS IN N.E.
Connecticut	169	12.1%	159 (156)*	94.1%	13.3%	10	5.9%	4.8%
Maine	381	27.2	304 (300)	79.8	25.5	77	20.2	37.2
Massachusetts	347	24.7	321 (320)	92.5	26.9	26	7.5	12.6
New Hampshire	199	14.2	153 (152)	76.9	12.8	46	23.1	22.2
Rhode Island	40	2.9	40 (40)	100.0	3.3	0	0	0
Vermont	265	18.9	217 (212)	81.9	18.2	48	18.1	23.2
Total	1401	100.0%	1194 (1180)	85.22%	100.0%	207	14.8%	100.0%

* The number of LEAs for which NEEDS has data.

fewer than ten (10) children from low income families was automatically ineligible for Title I funds.

The state education agencies (SEAs) were entitled to receive grants of up to 1% of their allocations for LEAs to provide for statewide administration of the program. Table III.1 and Figure III.1 indicate the distribution of the FY66 allocations to LEAs and SEAs in New England. In addition, Title I of the *Elementary and Secondary Education Act of 1965* (P.L. 89-10) was ammended by Public Law 89-313 to provide state education agencies with additional funds, over and above those initially allocated by Title I of P.L. 89-10, to support projects in state-sponsored institutions for handicapped children. The size of these grnats was determined for each state by multiplying the number of handicapped students enrolled in its special institutions by one half of the 1963-64 state average expenditure per pupil. Although the impact of these Federal funds has not been a major concern of the NEEDS study, some discussion of P.L. 89-313 projects is presented separately as Chapter VI.

III.2 THE ELIGIBILITY OF LEAS

Of the 1401 local education agencies in New England, 1194 or 85.2% were reported by the states as eligible for funds under the FY66 formula. The remaining 207 LEAs (14.8%) received no basic grant allocations and operated no Title I projects during FY66. Table III.2 presents the distribution of eligible and ineligible LEAs throughout the region and indicates the distribution of LEAs for which this study has obtained data. The percentages of eligible LEAs contributed by each of the six states corresponds closely to state percentages of total New England LEAs. The percentages of eligible LEAs *within* states, however, differs greatly. The three northern states, Maine, New Hampshire, and Vermont, have notably lower eligibility rates than the southern three and contribute 171 of the 207 ineligible LEAs. In other words, the three northern states alone account for 82.5% of the region's ineligible LEAs while they include only 60% of all New England LEAs. The percentages of eligible and ineligible LEAs within each state are also presented in Table III.2. Table III.3 suggests that eligibility is largely a function of urbanization. Ninety-eight percent (98%) of the characteristically non-metropolitan northern state LEAs are SMSA 4 and 5, compared to only 49% for the more urban-suburban southern states. The key factor, however, is degree of urbanization rather than state. For New England as a region, over 90% of all ineligible LEAs were in SMSA 4 and 5; few were in SMSA 3; none in SMSA 1 or 2. Because rural and semi-rural school districts have low populations, it follows that many had insufficient children to meet the initial criteria for FY66 Title I eligibility. In spite of the fact that some states waived the lower limit restrictions on maximum basic grants, many rural school districts still remained ineligible for funds. According to the formula, their ineligibility is legitimate; yet, there are indications that some of these LEAs may in fact have greater educational need than some of the larger qualifying districts. The information in Table III.4 indicates that the northern states rank

TABLE III.3 DISTRIBUTION OF NEW ENGLAND LEAS BY SMSA

	METROPOLITAN LEAS		NON-METROPOLITAN LEAS	PERCENT NON-METROPOLITAN	
NORTHERN STATES	Central City SMSA 1	SMSA 2 & 3	SMSA 4 & 5	Within State	In N.E.
Maine	3	8	370	97.1	33.6
New Hampshire	1	5	193	97.0	17.5
Vermont	0	0	265	100.0	24.1
Total	4	13	828	98.0	75.2
SOUTHERN STATES					
Connecticut	11	71	87	51.5	7.9
Massachusetts	14	163	170	49.0	15.4
Rhode Island	3	21	16	40.0	1.5
Total	28	255	273	49.1	24.8
NEW ENGLAND TOTAL	32	268	1101	78.6	100.0

TABLE III.4 STATE EXPENDITURES PER PUPIL, FY66 TITLE FORMULA RATES, AND INCOME DATA

STATE	STATE AVERAGE EXPENDITURE PER PUPIL 1963-64	TITLE I FORMULA RATE FOR FY66	N.E. RANK	PERCENTAGE OF STATE AID CONTRIBUTION	N.E. RANK	MEDIAN FAMILY INCOME 1960 Census	N.E. RANK
Connecticut	$508.11	$254.06	2	32.7%	1	$6,887	1
Maine	379.90	189.95	6	28.2	3	4,873	6
Massachusetts	517.82	258.91	1	21.5	5	6,272	2
New Hampshire	415.87	207.94	5	8.3	6	5,636	3
Rhode Island	502.12	251.06	3	30.4	2	5,598	4
Vermont	449.29	224.65	4	24.0	4	4,890	5

considerably below the southern in average expenditure per pupil. Other data, however, indicates that rural LEAs generally have lower expenditures per pupil than those in metropolitan areas. Although the data in Table III.5 is for Title I participant LEAs, it reflects a more general pattern.

TABLE III.5 AVERAGE LEA 1965-66 EXPENDITURE PER PUPIL
FOR TITLE I PARTICIPANTS

SMSA 1 - $456

SMSA 2 - $624

SMSA 3 - $496

SMSA 4 - $430

SMSA 5 - $396

Although the general cost of living is also lower in rural than in urban areas, the difference is not sufficient to compensate for the difference in per pupil expenditure. The costs of modern educational facilities, new curricula and materials, and, in particular, well-trained staff remain relatively constant regardless of location. It is difficult for non-metropolitan LEAs to provide the range of educational programs possible in metropolitan and suburban school systems; nor is it easy for them to attract and retain specialized professional staff when they tend to offer lower salary scales, fewer facilities and less access to centers of educational innovation. The implications of expenditure per pupil itself as one indicator of the quality of education offered by LEAs are not now fully weighed in determining Title I allocations.

In terms of income level as well, as Table III.4 indicates, the rural states tend to fall below the others. The data suggest that the general standard of living in rural areas is nearer the poverty level than it is in more metropolitan areas. It is not the central-city LEAs that raise the income average for the southern states, but rather the presence of many suburban communities, particularly those in SMSA 3. Highly urban LEAs in SMSA 1 are more similar financially to the rural school districts in SMSAs 4 and 5; the low income and low per pupil expenditure combination occurs at both ends of the SMSA continuum. This pattern raises questions about the procedures for distributing Title I funds. The LEAs most in need of assistance in supporting educational programs appear to be those in the highly metropolitan and in the rural areas. Because of their large base populations, LEAs in SMSA 1 are eligible to receive funds. LEAs in SMSAs 4 and 5, however, are frequently ineligible because they are too small to have sufficient qualifying children. At the same time, the wealthier suburban communities in SMSA 3 generally do qualify for funds primarily because they have larger population bases from which to draw. There is currently no compensation made for differences in income or school expenditure levels, nor for the fact that the percentage of children from low income families *within* an LEA may be comparatively high though the number itself is low.

Title I policy changes since FY66 do not correct these inequalities. Raising the poverty level from $2,000 to $3,000 and using more current welfare data enables all school districts - rural and urban alike - to identify more qualifying children. This change would seem to increase the ability of rural communities to meet the minimum Title I eligibility requirements. Yet, reduction of the total available funds and the accompanying increase in the lower limit on grant size have also raised the number of qualifying children necessary for eligibility. Small rural LEAs may still be unable to provide sufficient children to meet a higher minimum. As a result, the changes in policy may continue to reward the suburban areas beyond their relative need. Unless several small LEAs can be considered as one unit for Title I purposes and jointly awarded eligibility for a basic grant, they remain, under the current policy, the most likely group to be excluded from Title I.

III.3 THE DISTRIBUTION FORMULA

The procedure for distributing Title I funds to the eligible LEAs also contains inequalities similar to those found in the procedures for determining eligibility. While the criteria for identifying qualifying children is similar for all localities, the multiplying factor based on state average expenditure per pupil obviously varies from state to state and actually incorporates already existing inequalities among states. The consistently lower expenditures per pupil in northern New England rural states (Table III.4) indicate that per qualifying children eligible northern state LEAs are receiving less money than southern LEAs. Rather than compensating for the lower expenditure per pupil and lower income levels in poorer states, Title I is rewarding the wealthier states with proportionately higher allocations. The situation suggests need for further study of the Title I distribution policies and closer examination of the indices of relative effort and relative need. The number of low income family children alone is not a sufficient indicator of educational deprivation nor is state average expenditure per pupil an accurate measure of relative effort. For example, New Hampshire's state average expenditure per pupil ranks 5th in New England. Yet, New Hampshire LEAs receive only 8.3% of their school budgets from state aid (see Table III.4). Thus, these school districts are exerting proportionately more local effort toward education than are the localities in Connecticut where the state contributes 32.7% of the local school budgets. Factors such as state aid, local wealth and local tax base as well as ability to attract staff might all be examined, in an effort to develop equitable Title I distribution procedures.

III.4 A SUGGESTED POVERTY INDEX

Title I funds are distributed to the LEAs according to their numbers of children from low income families on the assumption that there is a high correlation between poverty and educational deprivation. Yet, examination of the numbers of such children alone does not permit comparison among LEAs in terms of their relative poverty or educational need. Two LEAs may each have twenty Title I qualifying children, yet one may be drawing from a much smaller population base and therefore actually be serving a much higher proportion of poor. Thus, the percentage rather than the number of children from low income families would be a more meaningful index of poverty density. Ideally, the poverty index figure for each LEA would be the percentage of its *total* resident children between the ages of five and eighteen who meet the Title I poverty criteria.

Unfortunately, for FY66, the appropriate data necessary for performing the poverty percentage calculations were not available. Neither state nor U.S. census reports contained complete statistics on the total numbers of children in the appropriate age group for all municipalities, let alone all local education agencies. The nearest comparable information is total public school enrollments from the FY66 Title I basic data forms; data on non-public school children are available for project attendance areas only. Because parochial schools, particularly in New England metropolitan LEAs, serve as many as 40% of resident children, the use of public school enrollment alone in the poverty percentage introduces large inaccuracies. The calculations result in a more pessimistic picture of the poverty density in metropolitan areas (SMSA 1, 2, and 3) than would occur if total resident children data were used. Yet it also works against rural LEAs that operate no high school and therefore are basing school enrollment upon elementary school children only. Nonetheless, in the absence of appropriate data, poverty percentages have been calculated using available public school enrollment data. Table III.6, column 4, presents the results for eligible LEAs. Even with the exaggeration of the poverty densities (the percentages would be lower if the total resident children had been used) the data still suggest that poverty is most prevalent in heavily urban (SMSA 1) and highly rural (SMSA 5) LEAs and that the suburban LEAs (SMSA 3) have proportionately the fewest poor.

The revised Title I basic data form used in FY67 appear to offer appropriate data for poverty percentage calculations. The form requests not only the number of resident children enrolled in an LEA's public schools, but also the numbers in non-public schools and not enrolled. These three totals provide total child resident data which, though not for the exact age group used to identify children from low income families, are nonetheless sufficient for comparable use. In theory, these data themselves are adequate although in practice they may be relatively difficult for some LEAs to obtain. While the public school administrators probably have access to enrollment data on private and parochial schools within their communities, they may have more difficulty in obtaining information on children either not enrolled or attending private schools outside of their communities. Though the absense of accurate data on these children would affect the calculations, the number of children in either group relative to the numbers of local public and private school children would probably be insufficient to distort the results significantly. Finally, while census and welfare data used to determine numbers of children from low-income families will always be somewhat behind the current population, particularly in rapidly growing central city areas, the distortion caused by this lag can be statistically controlled.

TABLE III.6 CHILDREN FROM LOW INCOME FAMILIES AS PERCENTAGES OF PUBLIC SCHOOL ENROLLMENTS

1. STATE	2. PARTICIPANT LEAS	3. ELIGIBLE NON-PARTICIPANT LEAS	4. ALL ELIGIBLE LEAS
Connecticut	5%	2%	5%
Maine	8	16	8
Massachusetts	7	4	6
New Hampshire	5	6	5
Rhode Island	10	4	10
Vermont	9	10	9
SMSA			
1	11	-	11
2	6	7	6
3	3	3	3
4	6	4	6
5	8	4	8
NEW ENGLAND AVERAGE	7%	4%	7%

Major Variable Codes

Code	Major Project Type
1	Academic Instruction
2	Reading
3	Language Arts
4	Instructional Services
5	General Remedial
6	Vocational
7	Special Classes
8	School Readiness
9	Materials and Equipment
10	Guidance and Psychological Services
11	Non-Academic Services to Pupils
12	Library
13	Non-Academic Enrichment Activities
14	In-Service Training

Code	State
1	Connecticut
2	Maine
3	Massachusetts
4	New Hampshire
5	Rhode Island
6	Vermont

Code	SMSA
1	Metropolitan - core city
2	Metropolitan - more than 50,000
3	Metropolitan - less than 50,000
4	Non-Metropolitan - more than 2,500
5	Non-Metropolitan - less than 2,500

III.5 ALLOCATIONS TO THE ELIGIBLE LEAS

Maximum basic grants totaling $34,701,514 were allocated to 1175 eligible LEAs.[1] Figure III.2 illustrates the distribution of these funds and Table III.7 presents the data cross-tabulated by state and SMSA. (The reader is referred to page 31 for instructions on reading the display.) While the average allocation for the region was $29,533, the grants ranged from a high of $3,619,840 for a metropolitan LEA to a low of $189.95, the pro-rated share for a rural elementary school district whose secondary school children are enrolled in a regional high school district. The variable that most influences grant size appears to be degree of urbanization. The high average grant size of $494,266 for LEAs in SMSA 1 consistently decreases to a low of $5,572 in SMSA 5. The effect of large allocations to central city LEAs is also reflected in state averages. Grants in the more urban states (Table III.7, States 1, 3, and 5) were from 400% to nearly 800% larger than in the less urban states.

The thirty-one (31) LEAs in SMSA 1 received 44% of the New England allocation, yet these LEAs constitute under 3% of all New England eligible LEAs. The reverse pattern occurs for the 590 LEAs in SMSA 5. Here only 9.5% of New England's allocation was designated for 50% of its eligible LEAs. Since grant sizes were based upon the numbers of low income family children, it follows that the distribution of qualifying children presented in Table III.8 is similar to the dollar distribution. The two are not identical, however, since the states with lower average expenditures had larger percentages of qualifying children than of Title I funds.

---

[1] State records indicate $34,973,592 to 1194 LEAs. The NEEDS study obtained no data on nineteen (19) LEAs.

Regionally, for eligible LEAs, the percentage of children from low income families was 7% of the total public school enrollment (see Table III.6).

The dollars provided by the maximum basic grant allocations, however, indicate only the potential impact of Title I. In practice, the amount of Title I money encumbered during FY66 was considerably less than the allocations themselves. Three factors worked to reduce the potential fiscal impact of Title I:

(1) Eligible LEAs did not participate in the Title I program.
(2) Participant LEAs did not apply for their full quota of funds.
(3) Most projects did not expend their total approved budgets.

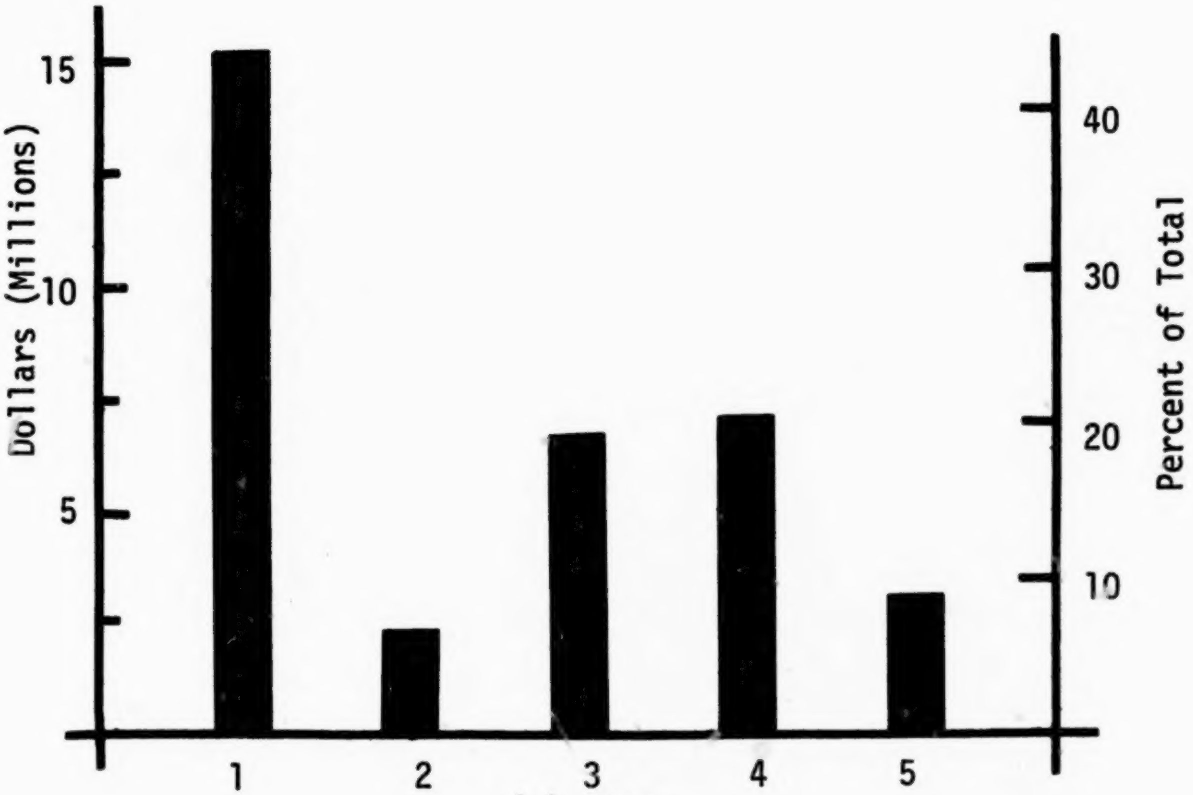
III.5.1 Eligible Non-Participants

Of the 1180 eligible LEAs, nearly twenty percent (20%) did not receive (and therefore expend) any of their initial Title I allocations. The distribution of these 235 LEAs is presented in Figure III.3, the cross-tabulated data on the sizes of their maximum basic grants are presented in Table III.9. These "eligible non-participants" were initially offered a total of $3,203,494, but because they were not involved in Title I activities this 9.2% of the New England allocation automatically remained unused. Table III.10 shows within each state-SMSA group the percentage of that group's initial allocation designated to eligible non-participants.

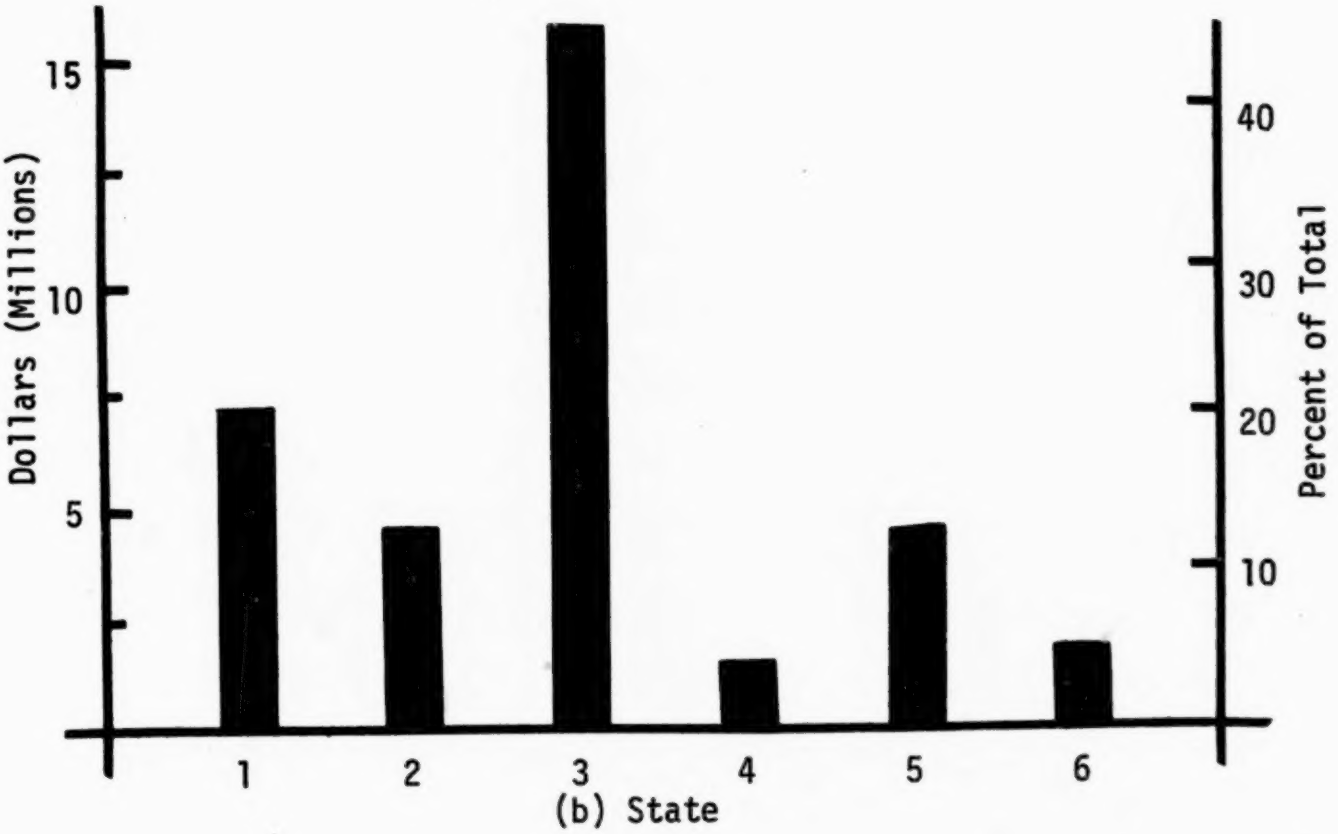
From the available data, it is difficult to determine why these LEAs did not take advantage of Title I. Three of the six state departments supplied the NEEDS study with gross indications, but the infor-

FIG. III.2 TOTAL ALLOCATIONS TO NEW ENGLAND (Maximum Basic Grant)

Total: $34.7 Million



(a) SMSA



(b) State

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CROSS-TABULATION FOR ELIGIBLE LEAS                                              TABLE NO. III.7

  THE TABULATED VARIABLE IS OVERALL TOTAL GRANTS        UNITS ARE DOLLARS           GRAND COUNT      =           1175
                                                                                    GRAND MISSES     =              5
  SMSA TYPE ACROSS BY STATE COWN                                                    GRAND TOTAL      =     34701514.00
                                                                                    GRAND MEAN       =        29533.20
                                                                                    GRAND STD. DEV.  =       137792.49
 *        1              2              3              4              5             GRAND RANGE      =      3619650.00
  *
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.94      11 I 0.17       2 I 5.53      65 I 4.00      47 I 2.64      31 I 13.28      156 M =    46035.06
 1 I 4377369.00   I  195472.00   I 1501126.00   I  940886.00   I  166623.00   I 7181470.00   S =   140595.51
   I    0   12.61 I    0    0.56 I    0    4.33 I    0    2.71 I    0    0.48 I    0    20.69 R =  1161303.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.26       3 I 0.          0 I 0.68       8 I 6.98      82 I 17.26     203 I 25.19      296 M =    13374.06
 2 I  449801.00   I       0.     I  143539.00   I 2117836.00   I 1247546.00   I 3958722.00   S =    23241.66
   I    0    1.30 I    0    0.   I    0    0.41 I    1    6.10 I    3    3.60 I    4    11.41 R =   276187.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 1.11      13 I 0.77       9 I 12.51    147 I 6.21      73 I 6.64      78 I 27.23      320 M =    51066.77
 3 I 8248291.00   I 2010528.00   I 3968155.00   I 1685952.00   I  428442.00   I 16341368.00  S =   224179.19
   I    0   23.77 I    0    5.79 I    0   11.44 I    0    4.86 I    0    1.23 I    0    47.09 R =  3619328.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.09       1 I 0.          0 I 0.34       4 I 3.74      44 I 8.77     103 I 12.94      152 M =     9475.99
 4 I  200662.00   I       0.     I   36388.00   I  790330.00   I  412971.00   I 1440351.00   S =    19186.96
   I    0    0.58 I    0    0.   I    0    0.10 I    0    2.28 I    0    1.19 I    0     4.15 R =   200455.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.26       3 I 0.09       1 I 1.70      20 I 0.94      11 I 0.43       5 I 3.40        40 M =   100988.82
 5 I 2046139.00   I  143104.00   I 1072777.00   I  753301.00   I   24232.00   I 4039553.00   S =   238666.14
   I    0    5.90 I    0    0.41 I    0    3.09 I    0    2.17 I    0    0.07 I    0    11.64 R =  1483937.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.         0 I 0.          0 I 0.          0 I 3.49      41 I 14.47     170 I 17.96      211 M =     8246.68
 6 I       0.     I       0.     I       0.     I  732360.00   I 1007690.00   I 1740050.00   S =     9719.88
   I    0    0.   I    0    0.   I    0    0.   I    0    2.11 I    1    2.90 I    1     5.01 R =    98172.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I

     2.64      31   1.02      12  20.77     244  25.36     298  50.21     590      100.00   1175
   15322256.00     2349104.00     6721985.00     7020665.00     3287504.00          34701514.00
        0   44.15      0    6.77      0   19.37      1   20.23      4    9.47             5  100.00

   M =  494266.32 M =  195758.67 M =   27549.12 M =   23559.28 M =     5572.04      M =    29533.20
   S =  677500.73 S =  124454.59 S =   30810.37 S =   30027.15 S =     5346.54      S =   137792.49
   R = 3562496.00 R =  400480.00 R =  287977.00 R =  302209.00 R =    75410.00      R =  3619650.00
```

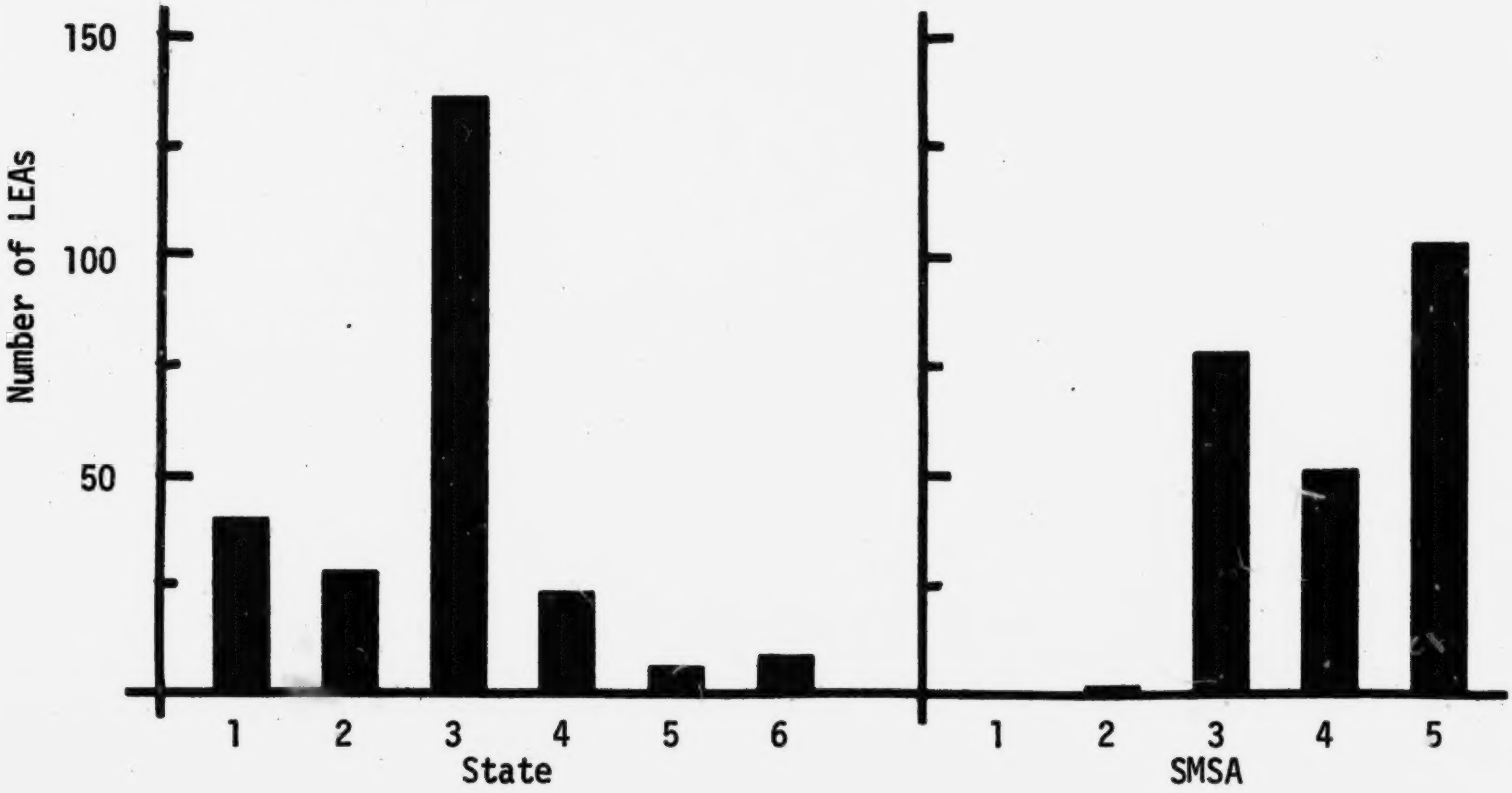
TABLE III.8 DISTRIBUTION OF TITLE I QUALIFYING CHILDREN

N = 1,175 LEAS

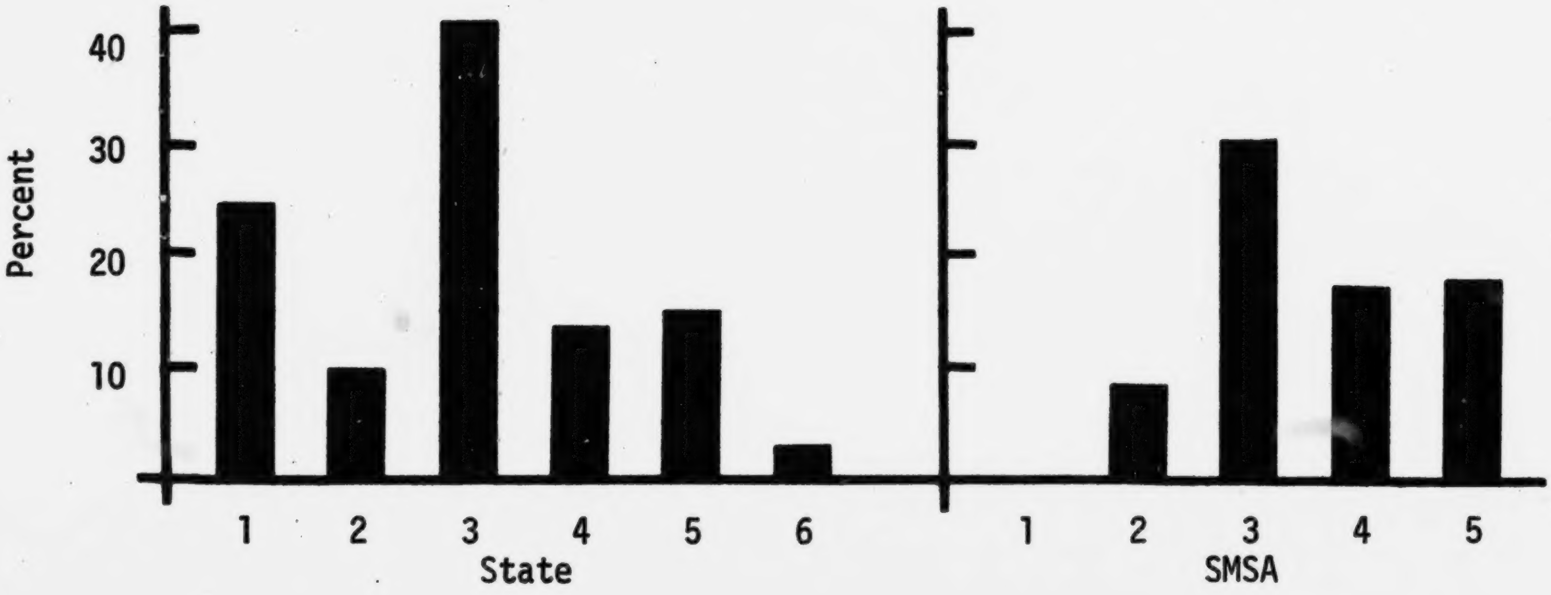
STATE	NUMBER OF QUALIFYING CHILDREN	PERCENT OF NEW ENGLAND TOTAL
Connecticut	28,267	19.8%
Maine	20,841	14.6
Massachusetts	63,116	44.2
New Hampshire	6,927	4.8
Rhode Island	16,090	11.3
Vermont	7,577	5.3
SMSA		
1	60,570	42.4%
2	9,105	6.4
3	26,439	18.5
4	31,355	22.0
5	15,349	10.7
NEW ENGLAND TOTAL	142,818	100.0%

FIG. III.3 NON-PARTICIPANT LEAS (Data from State Depts.)
N = 235

(a) Number of Non-Participant LEAs



(b) Percent of Eligible LEAs That Were Non-Participant
Within State and SMSA



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CROSS-TABULATION FOR ELIGIBLE NON-PARTICIPANT LEAS                  TABLE NO. III.9

 THE TABULATED VARIABLE IS ALLOCATED TO NON-PART.      UNITS ARE DOLLARS        GRAND COUNT      =              235
                                                                                GRAND MISSES     =                0
 SMSA TYPE ACROSS BY STATE DOWN                                                 GRAND TOTAL      =       3203494.00
                                                                                GRAND MEAN       =         13631.89
                                                                                GRAND STD. DEV.  =         20709.67
*        1              2              3              4              5          GRAND RANGE      =        166210.00
 *
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.         0 I  0.         0 I  7.23      17 I  5.96      14 I  3.40       8 I 16.60      39 M =   14758.62
1 I      0.      I      0.      I  304329.00   I  240012.00   I   31245.00   I  575586.00  S =   16680.31
  I    0    0.   I    0    0.   I   0    9.50  I   0    7.49  I   0    0.98  I   0   17.97 R =   73417.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.         0 I  0.         0 I  0.         0 I  0.         0 I 11.91      28 I 11.91      28 M =    4938.79
2 I      0.      I      0.      I      0.      I      0.      I  138286.00   I  138286.00  S =    4132.71
  I    0    0.   I    0    0.   I    0    0.   I    0    0.   I   0    4.32  I   0    4.32 R =   15766.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.         0 I  0.43       1 I 24.26      57 I 13.62      32 I 18.72      44 I 57.02     134 M =   16531.10
3 I      0.      I  166400.00   I  1229824.00  I  565504.00   I  253440.00   I 2215168.00  S =   24705.50
  I    0    0.   I   0    5.19  I   0   38.39  I   0   17.65  I   0    7.91  I   0   69.15 R =  165888.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.         0 I  0.         0 I  0.43       1 I  0.85       2 I  7.66      18 I  8.94      21 M =    4309.33
4 I      0.      I      0.      I   20794.00   I    4367.00   I   65335.00   I   90496.00  S =    4642.66
  I    0    0.   I    0    0.   I   0    0.65  I   0    0.14  I   0    2.04  I   0    2.82 R =   20170.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.         0 I  0.         0 I  0.85       2 I  1.28       3 I  0.43       1 I  2.55       6 M =   21898.33
5 I      0.      I      0.      I   50714.00   I   75263.00   I    5413.00   I  131390.00  S =   13875.96
  I    0    0.   I    0    0.   I   0    1.58  I   0    2.35  I   0    0.17  I   0    4.10 R =   36012.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.         0 I  0.         0 I  0.         0 I  0.43       1 I  2.55       6 I  2.98       7 M =    7509.71
6 I      0.      I      0.      I      0.      I   20668.00   I   31900.00   I   52568.00  S =    6261.40
  I    0    0.   I    0    0.   I    0    0.   I   0    0.65  I   0    1.00  I   0    1.64 R =   19769.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I

     0.         0   0.43       1   32.77      77   22.13      52   44.68     105      100.00     235
         0.         166400.00      1605661.00      905814.00      525619.00          3203494.00
       0    0.       0    5.19      0   50.12      0   28.28      0   16.41           0  100.00

   M =        0.   M =  166400.00 M =   20852.74 M =   17419.50 M =    5005.90      M =   13631.89
   S =        0.   S =         0. S =   21755.57 S =   22754.89 S =    3789.98      S =   20709.67
   R =        0.   R =         0. R =  122143.00 R =  143621.00 R =   15766.00      R =  166210.00
```

Major Variable Codes

Code	Major Project Type
1	Academic Instruction
2	Reading
3	Language Arts
4	Instructional Services
5	General Remedial
6	Vocational
7	Special Classes
8	School Readiness
9	Materials and Equipment
10	Guidance and Psychological Services
11	Non-Academic Services to Pupils
12	Library
13	Non-Academic Enrichment Activities
14	In-Service Training

Code	State
1	Connecticut
2	Maine
3	Massachusetts
4	New Hampshire
5	Rhode Island
6	Vermont

Code	SMSA
1	Metropolitan - core city
2	Metropolitan - more than 50,000
3	Metropolitan - less than 50,000
4	Non-Metropolitan - more than 2,500
5	Non-Metropolitan - less than 2,500

```
CROSS-TABULATICN FCR ELIGIBLE NCN-PARTICIPANT LEAS                    TABLE NC. III.10

  THE TABULATEC VARIABLE IS PCT. ALLCC. TC NCN-PART.    UNITS ARE (PERCENT)

  SMSA TYPE ACRCSS BY STATE CCWN

 *        1              2              3              4              5
  *
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I C.         1 I C.         1 I C.         1 I C.         1 I C.         1 I
 1 I        C.    I        C.    I     20.27    I     25.51    I     18.75    I
   I   C    C.    I   C    C.    I   C    C.    I   C    C.    I   C    C.    I
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I C.         1 I C.         C I C.         1 I C.         1 I C.         1 I
 2 I        C.    I        C.    I        0.    I        C.    I     11.C8    I
   I   C    C.    I   C    C.    I   C    C.    I   C    C.    I   C    C.    I
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I C.         1 I C.         1 I C.         1 I C.         1 I C.         1 I
 3 I        C.    I      8.28    I     30.59    I     33.54    I     59.15    I
   I   C    C.    I   C    C.    I   C    C.    I   C    C.    I   C    C.    I
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I C.         1 I C.         C I C.         1 I C.         1 I C.         1 I
 4 I        C.    I        C.    I     57.15    I      C.55    I     15.82    I
   I   C    C.    I   C    C.    I   C    C.    I   C    C.    I   C    C.    I
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I C.         1 I C.         1 I 0.         1 I C.         1 I C.         1 I
 5 I        C.    I        C.    I      4.73    I      5.55    I     22.34    I
   I   C    C.    I   C    C.    I   C    C.    I   C    C.    I   C    C.    I
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I C.         C I C.         C I C.         C I C.         1 I C.         1 I
 6 I        0.    I        C.    I        0.    I      2.82    I      3.17    I
   I   C    C.    I   C    C.    I   C    C.    I   C    C.    I   C    C.    I
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
```

mation covers only fifty (50) of the 235 LEAs in question. Since state departments worked with applicant LEAs to revise inadequate projects so that they could be funded, we can only hypothesize that this subset may be representative of all 235 non-participant school districts.

No Reason Given		185
Reason Given		50
Project cancelled	2	
Project unapproved	2	
Did not apply	46	
Total		235

Examination of some variables that might distinguish participant from non-participant LEAs indicates that goegraphic location was most meaningful. Table III.11 presents the percentage distributions of eligible participant and non-participant LEAs by SMSA and state. The most important determinant appears to be state. In Massachusetts alone, 41.7% of its eligible LEAs were not involved in Title I compared to the regional rate of 19.9%. Second in importance is SMSA. The LEAs in SMSA 5 contributed 44.7% of all non-participants. Yet, because so many LEAs in this group were eligible (50.3% of all New England's eligible LEAs), this figure is less indicative than the percentages within SMSAs. The highest internal non-participation rate was in SMSA 3 where 31.6% of the eligible LEAs did not participate. The SMSA percentages, however, are closely linked to state; LEAs in SMSA 3 of Massachusetts alone comprised 24% of all non-participants.

The size of an LEA's maximum basic grant may have had some effect upon participation. LEAs with low allocations may have considered the financial benefit from Title I not worth the time necessary for planning and applying for project funds. The comparison of average allocation sizes presented in Table III.12 indicates that the basic grants offered non-participant LEAs were lower than those offered participants. SMSA averages are more informative than those for states, because state figures are inflated by the large allocations to participant LEAs in SMSA 1.

Comparison of the 1964-65 average LEA expenditures per pupil indicates that the non-participants in SMSA 3, the suburban communities, had higher expenditures per pupil than SMSA 3 participants, but that the pattern reverses for SMSA 5. In the latter group, non-participants actually had lower expenditures per pupil than participants. In terms of the poverty density presented in Table III.6, non-participant LEAs in all SMSAs had proportionately fewer qualifying children than participant LEAs. This discrepancy is most extreme in SMSA 5.

Given the present data, however, it is not possible to draw conclusions about the factors contributing to non-participation. Local attitudes toward education generally and toward Federal support in particular need further examination as do other economic and geographic differences.

III.5.2 Characteristics of Participant LEAs

The participant LEAs were awarded a total of $31,498,020 in maximum basic grants. Table III.13 indicates the distribution of participants and the maximum allocation sizes by state and SMSA. Table III.14 pre-

TABLE III.11 DISTRIBUTION OF PARTICIPANT AND NON-PARTICIPANT LEAS

STATE	ELIGIBLE LEAS	PARTICIPANT LEAS	NON-PARTICIPANT LEAS	PERCENT OF NON-PARTICIPANT LEAS IN NEW ENGLAND
Connecticut	156	117 (75.5%)	39 (24.5%)	16.6%
Maine	300	272 (90.8)	28 (9.2)	11.9
Massachusetts	320	186 (58.3)	134 (41.7)	57.0
New Hampshire	152	131 (86.3)	21 (13.7)	8.9
Rhode Island	40	34 (85.0)	6 (15.0)	2.6
Vermont	212	205 (96.8)	7 (3.2)	3.0
SMSA				
1	31	31 (100 %)	0 0.0%	0.0%
2	12	11 (91.7)	1 (8.3)	0.4
3	244	167 (68.4)	77 (31.6)	32.8
4	299	247 (82.6)	52 (17.4)	22.1
5	594	489 (82.3)	105 (17.7)	44.7
NEW ENGLAND TOTAL	1180	945 (80.1%)	235 (19.9%)	100.00%

TABLE III.12 AVERAGE MAXIMUM BASIC GRANTS BY STATE AND SMSA

STATE	ELIGIBLE LEAS	PARTICIPANT LEAS	NON-PARTICIPANT LEAS
Connecticut	$46,035	$56,461	$14,759
Maine	13,374	14,255	4,939
Massachusetts	51,067	75,947	16,531
New Hampshire	9,476	10,304	4,309
Rhode Island	100,989	114,946	21,898
Vermont	8,247	8,272	7,510
SMSA			
1	$494,266	$494,266	-
2	195,759	198,428	166,400
3	27,549	30,637	20,853
4	23,559	24,857	17,420
5	5,572	5,695	5,006
NEW ENGLAND AVERAGE	$ 29,533	$ 33,509	$ 13,631

```
CROSS-TABULATION FOR TITLE I BASIC DATA FOR LEAS                  TABLE NO. III.13

  THE TABULATED VARIABLE IS MAXIMUM BASIC GRANT       UNITS ARE DOLLARS      GRAND COUNT      =             940
                                                                             GRAND MISSES     =               5
  SMSA TYPE ACROSS BY STATE DOWN                                             GRAND TOTAL      =     31498020.00
                                                                             GRAND MEAN       =        33508.53
                                                                             GRAND STD. DEV.  =       153451.05
*        1               2               3               4               5   GRAND RANGE      =      3619633.00
 *
  I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I               I               I
  I  1.17      11 I  0.21       2 I  5.11      48 I  3.51      33 I  2.45      23 I 12.45      117 M =    56460.55
1 I  4377363.00   I   195472.00   I  1196797.00   I   700874.00   I   135378.00   I  6605884.00   S =   160712.85
  I    0   13.90  I   0      0.62 I   0      3.80 I   0      2.23 I   0      0.43 I    0    20.97 R =  1161024.00
  I               I               I               I               I               I
  I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I               I               I
  I  0.32       3 I  0.         0 I  0.85       8 I  8.72      82 I 18.62     175 I 28.51      268 M =    14255.36
2 I   449801.00   I        0.     I   143539.00   I  2117836.00   I  1109260.00   I  3820436.00   S =    24220.15
  I    0    1.43  I   0      0.   I   0      0.46 I   1      6.72 I   3      3.52 I    4    12.13 R =   275808.00
  I               I               I               I               I               I
  I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I               I               I
  I  1.38      13 I  0.85       8 I  9.57      90 I  4.36      41 I  3.62      34 I 19.79      186 M =    75947.31
3 I  8248291.00   I  1844128.00   I  2738331.00   I  1120448.00   I   175002.00   I 14126200.00   S =   290765.25
  I    0   26.19  I   0      5.85 I   0      8.69 I   0      3.56 I   0      0.56 I    0    44.85 R =  3619328.00
  I               I               I               I               I               I
  I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I               I               I
  I  0.11       1 I  0.         0 I  0.32       3 I  4.47      42 I  9.04      85 I 13.94      131 M =    10304.24
4 I   200662.00   I        0.     I    15594.00   I   785963.00   I   347636.00   I  1349855.00   S =    20463.01
  I    0    0.64  I   0      0.   I   0      0.05 I   0      2.50 I   0      1.10 I    0     4.29 R =   200455.00
  I               I               I               I               I               I
  I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I               I               I
  I  0.32       3 I  0.11       1 I  1.91      18 I  0.85       8 I  0.43       4 I  3.62       34 M =   114945.97
5 I  2046139.00   I   143104.00   I  1022063.00   I   678038.00   I    18819.00   I  3908163.00   S =   256304.76
  I    0    6.50  I   0      0.45 I   0      3.24 I   0      2.15 I   0      0.06 I    0    12.41 R =  1483937.00
  I               I               I               I               I               I
  I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I               I               I
  I  0.         0 I  0.         0 I  0.         0 I  4.26      40 I 17.45     164 I 21.70      204 M =     8271.97
6 I       0.      I        0.     I        0.     I   711692.00   I   975790.00   I  1687482.00   S =     9815.97
  I    0     0.   I   0      0.   I   0      0.   I   0      2.26 I   1      3.10 I    1     5.36 R =    98172.00
  I               I               I               I               I               I
  I---------------I---------------I---------------I---------------I---------------I

     3.30      31    1.17      11   17.77     167   26.17     246   51.60     485        100.00     940
   15322256.00      2182704.00      5116324.00      6114851.00      2761885.00           31498020.00
      0   48.65       0     6.93       0   16.24       1   19.41       4    8.77             5  100.00

   M =  494266.32 M =  198427.63 M =   30636.67 M =   24857.12 M =    5694.61        M =   33508.53
   S =  677500.73 S =  129659.36 S =   33742.13 S =   31194.79 S =    5619.60        S =  153451.05
   R = 3562496.00 R =  400480.00 R =  286933.00 R =  302209.00 R =   75393.00        R = 3619633.00
```

Major Variable Codes

Code	Major Project Type
1	Academic Instruction
2	Reading
3	Language Arts
4	Instructional Services
5	General Remedial
6	Vocational
7	Special Classes
8	School Readiness
9	Materials and Equipment
10	Guidance and Psychological Services
11	Non-Academic Services to Pupils
12	Library
13	Non-Academic Enrichment Activities
14	In-Service Training

Code	State
1	Connecticut
2	Maine
3	Massachusetts
4	New Hampshire
5	Rhode Island
6	Vermont

Code	SMSA
1	Metropolitan - core city
2	Metropolitan - more than 50,000
3	Metropolitan - less than 50,000
4	Non-Metropolitan - more than 2,500
5	Non-Metropolitan - less than 2,500

```
CROSS-TABULATION FOR TITLE I BASIC DATA FOR LEAS                            TABLE NO. III.14

 THE TABULATED VARIABLE IS 1965 TOTAL ENROLLMENT       UNITS ARE STUDENTS         GRAND COUNT      =           914
                                                                                  GRAND MISSES     =            31
 SMSA TYPE ACROSS BY STATE DOWN                                                   GRAND TOTAL      =     1821171.00
                                                                                  GRAND MEAN       =        1992.53
                                                                                  GRAND STD. DEV.  =        4659.12
 *        1                 2                 3                 4                 5               GRAND RANGE      =       53127.00
  *
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 1.20       11 I 0.22        2 I 5.14       47 I 3.61       33 I 2.52       23 I 12.69      116 M =    4132.03
 1 I  170206.00    I   22736.00    I  202614.00    I   74080.00    I    9679.00    I   479315.00  S =    5086.84
   I   0     9.35  I   0     1.25  I   1    11.13  I   0     4.07  I   0     0.53  I    1   26.32 R =   26216.00
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 0.33        3 I 0.          0 I 0.88        8 I 8.97       82 I 18.16     166 I 28.34      259 M =     914.00
 2 I   24558.00    I        0.     I   18922.00    I  129151.00    I   64055.00    I   236726.00  S =    1785.99
   I   0     1.35  I   0     0.    I   0     1.04  I   1     7.09  I  12     3.52  I   13   13.00 R =   20050.00
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 1.31       12 I 0.88        8 I 9.63       88 I 4.49       41 I 3.28       30 I 19.58      179 M =    4190.58
 3 I  254536.00    I  100335.00    I  304580.00    I   82845.00    I    7809.00    I   750113.00  S =    8152.30
   I   1    13.98  I   0     5.51  I   2    16.72  I   0     4.55  I   4     0.43  I    7   41.19 R =   53165.00
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 0.11        1 I 0.          0 I 0.33        3 I 4.49       41 I 8.97       82 I 13.89      127 M =     917.83
 4 I   13370.00    I        0.     I    1715.00    I   77627.00    I   23853.00    I   116565.00  S =    1615.15
   I   0     0.73  I   0     0.    I   0     0.09  I   1     4.26  I   3     1.31  I    4    6.40 R =   13356.00
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 0.33        3 I 0.11        1 I 1.97       18 I 0.88        8 I 0.44        4 I  3.72       34 M =    4613.24
 5 I   55556.00    I   12282.00    I   71386.00    I   16444.00    I    1182.00    I   156850.00  S =    [illegible]
   I   0     3.05  I   0     0.67  I   0     3.92  I   0     0.90  I   0     0.06  I    0    8.61 R =    [illegible]
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 0.          0 I 0.          0 I 0.          0 I 4.16       38 I 17.61     161 I 21.77      199 M =     410.06
 6 I        0.     I        0.     I        0.     I   44934.00    I   36668.00    I    81602.00  S =     637.57
   I   0     0.    I   0     0.    I   0     0.    I   2     2.47  I   4     2.01  I    6    4.48 R =    6231.00
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I

     3.28       30   1.20       11   17.94     164   26.59     243   50.98     466        100.00    914
     518226.00        135357.00        599217.00        425125.00        143246.00          1821171.00
      1    28.46      0     7.43      3    32.90      4    23.34     23     7.87             31  100.00

   M =    17274.20 M =    12305.18 M =     3653.76 M =     1749.49 M =      307.39       M =    1992.53
   S =    16002.64 S =     3003.80 S =     3016.69 S =     1463.20 S =      951.89       S =    4659.12
   R =    88300.00 R =    11362.00 R =    22386.00 R =     9042.00 R =    20050.00       R =   53127.00
```

sents the total public school enrollments of these school districts and Table III.15, the LEA average expenditure per pupil for 1965-66. More detailed enrollment and school budget data is presented in the Statistical Supplement, Volume II, Part 1.

Table III.16 illustrates the potential impact of Title I funds upon local school budgets, assuming these LEAs took full advantage of their maximum basic grants. Generally, the potential increase was greatest for LEAs in SMSA 1 and smallest for those in SMSA 2 and 3. While these calculations are based upon total school budgets, it follows that Title I funds potentially affected expenditures per pupil in the same pattern. Obviously, however, the funds were not designed for all children in a system. Had Title I grants been spent only upon qualifying children from low income families, the expenditures per pupil for *these* children would have been increased theoretically by half their state's average expenditure per pupil. Yet, the LEAs did not in fact fully utilize their initial allocations and it is inaccurate to assume that either the specific qualifying children or the same numbers of children were the actual participants in the projects operated by the LEAs. The above data presents only the hypothetical effect of Title I funds. The following section discusses the approved funds and expenditures; Chapter V examines the fiscal impact of Title I during FY66 in terms of actual expenditures.

III.6 THE APPROVED FUNDS

The 945 participant LEAs were actually awarded a total of $27,543,920 during FY66 for the operation of individual Title I projects. Table III.17 presents the state by SMSA distribution of these approved funds, and Figure III.4 compares the amounts approved to the maximum basic grants. These LEAs applied for and received an average of 87.4% of their share of the New England allocation. The portions of their grants for which they did not apply and the untapped grants of the eligible non-participants combined to reduce the amount of FY66 Title I money finally distributed to only 79.4% of New England's initial allocation. The remaining 20.6% went unencumbered.

The $27,543,920 in approved funds represents the total proposed operating budgets of the 1302 projects planned by the 945 participating LEAs. The number of projects conducted by an LEA was a local option so that an LEA could elect to spend its Title I money on one large project or on several small and perhaps unrelated activities. For this reason, the numbers of projects alone are less indicative of the intensity of Title I activity than are such measures as project enrollments, durations, and budget sizes. Yet the projects do provide a useful index of what the LEAs regarded as their major educational needs. All project applications were classified according to the primary thrust of the activities proposed. The central activity upon which an LEA chose to spend its Title I funds is likely to reflect its highest priority need, or at least the area in which the LEA considered it most feasible to operate additional educational programs. Thus, the high number of

Major Variable Codes

Code	Major Project Type
1	Academic Instruction
2	Reading
3	Language Arts
4	Instructional Services
5	General Remedial
6	Vocational
7	Special Classes
8	School Readiness
9	Materials and Equipment
10	Guidance and Psychological Services
11	Non-Academic Services to Pupils
12	Library
13	Non-Academic Enrichment Activities
14	In-Service Training

Code	State
1	Connecticut
2	Maine
3	Massachusetts
4	New Hampshire
5	Rhode Island
6	Vermont

Code	SMSA
1	Metropolitan - core city
2	Metropolitan - more than 50,000
3	Metropolitan - less than 50,000
4	Non-Metropolitan - more than 2,500
5	Non-Metropolitan - less than 2,500

```
CROSS-TABULATION FOR TITLE I BASIC DATA FOR LEAS                      TABLE NO.  III.15

 THE TABULATED VARIABLE IS 65-66 AVG PPE - TOTAL        UNITS ARE ($/PUPIL)

 SMSA TYPE ACROSS BY STATE DOWN

 *       1               2               3               4       .       5
  *
    I---------------I---------------I---------------I---------------I---------------I
    I               I               I               I               I               I
    I  0.        11 I  0.         2 I  0.        48 I  0.        33 I  0.        23 I
  1 I      447.84   I      749.45   I      526.34   I      523.85   I      535.60   I
    I    0     0.   I    0     0.   I    0     0.   I    0     0.   I    0     0.   I
    I               I               I               I               I               I
    I---------------I---------------I---------------I---------------I---------------I
    I               I               I               I               I               I
    I  0.         3 I  0.         0 I  0.         8 I  0.        83 I  0.       178 I
  2 I      266.27   I         0.    I      443.10   I      316.43   I      298.60   I
    I    0     0.   I    0     0.   I    0     0.   I    0     0.   I    0     0.   I
    I               I               I               I               I               I
    I---------------I---------------I---------------I---------------I---------------I
    I               I               I               I               I               I
    I  0.        13 I  0.         8 I  0.        90 I  0.        41 I  0.        34 I
  3 I      447.45   I      607.05   I      496.56   I      494.14   I      563.59   I
    I    0     0.   I    0     0.   I    0     0.   I    0     0.   I    0     0.   I
    I               I               I               I               I               I
    I---------------I---------------I---------------I---------------I---------------I
    I               I               I               I               I               I
    I  0.         1 I  0.         0 I  0.         3 I  0.        42 I  0.        65 I
  4 I      380.18   I         0.    I      413.26   I      473.66   I      465.07   I
    I    0     0.   I    0     0.   I    0     0.   I    0     0.   I    0     0.   I
    I               I               I               I               I               I
    I---------------I---------------I---------------I---------------I---------------I
    I               I               I               I               I               I
    I  0.         3 I  0.         1 I  0.        18 I  0.         5 I  0.         4 I
  5 I      562.95   I      512.52   I      454.01   I      484.45   I      611.96   I
    I    0     0.   I    0     0.   I    0     0.   I    0     0.   I    0     0.   I
    I               I               I               I               I               I
    I---------------I---------------I---------------I---------------I---------------I
    I               I               I               I               I               I
    I  0.         0 I  0.         0 I  0.         0 I  0.        40 I  0.       165 I
  6 I         0.    I         0.    I         0.    I      468.15   I      407.37   I
    I    0     0.   I    0     0.   I    0     0.   I    0     0.   I    0     0.   I
    I               I               I               I               I               I
    I---------------I---------------I---------------I---------------I---------------I
```

CROSS-TABULATION FOR TITLE I BASIC DATA FOR LEAS TABLE NO. III.16

THE TABULATED VARIABLE IS T I GRANT AS PERCENT OF ALL 65-66 EXPENDITURES (INC. T I)

SMSA TYPE ACROSS BY STATE DOWN UNITS ARE PERCENT

*	1	2	3	4	5
1	5.5	1.1	1.2	1.8	2.6
2	4.7	0	2.6	4.6	7.0
3	6.0	3.2	1.7	3.0	3.4
4	4.2	0	2.2	2.2	3.4
5	6.7	2.2	3.7	7.4	2.8
6	0	0	0	3.0	6.3

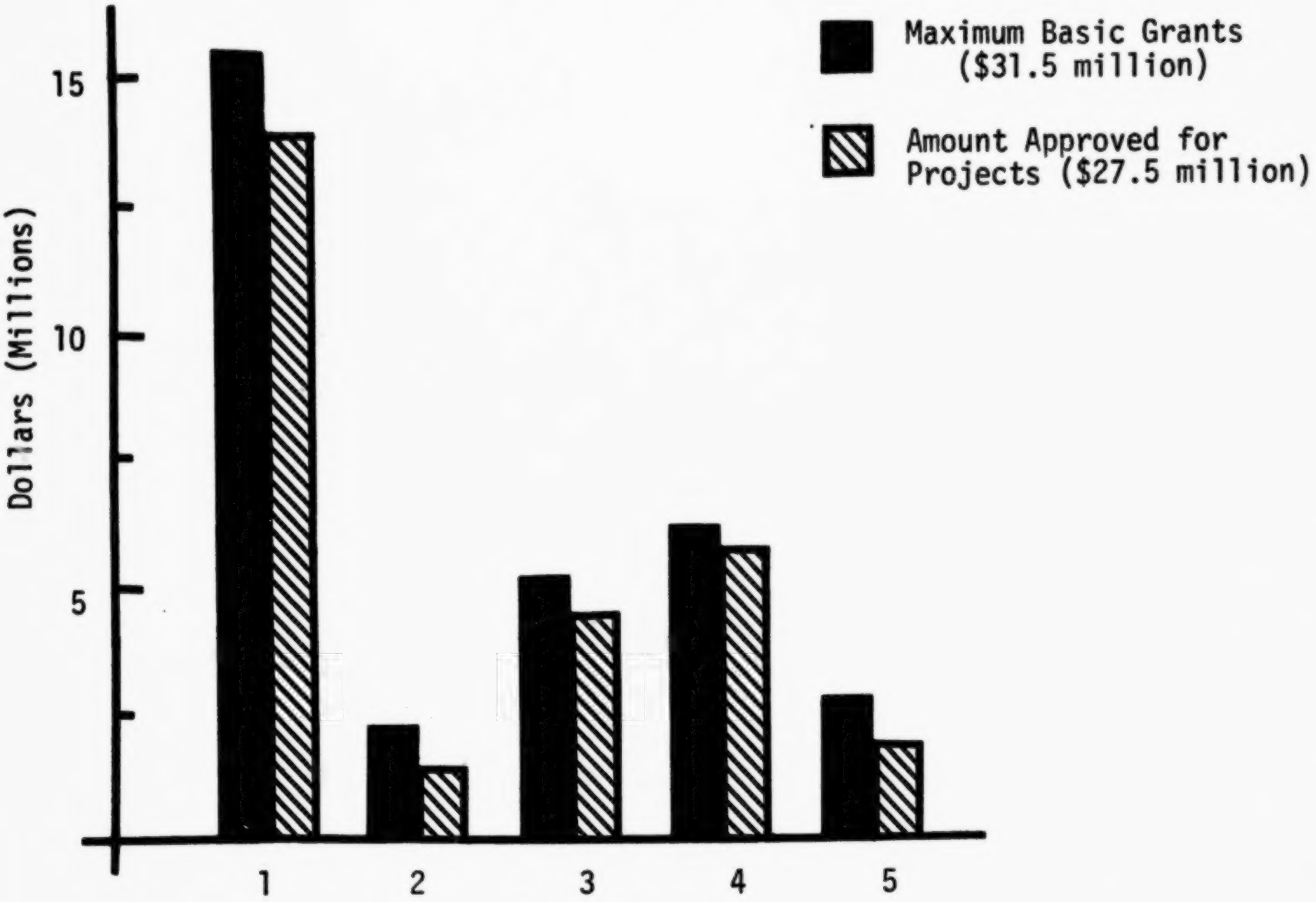
```
CROSS-TABULATION FOR TITLE I APPLICATIONS DATA                    TABLE NO. [illegible].17

 THE TABULATED VARIABLE IS TOTAL AMOUNT APPROVED        UNITS ARE DOLLARS        GRAND COUNT      =          1302
                                                                                 GRAND MISSES     =             0
 SMSA TYPE ACROSS BY STATE DOWN                                                  GRAND TOTAL      =   27543920.00
                                                                                 GRAND MEAN       =      21155.08
                                                                                 GRAND STD. DEV.  =      65461.27
 .         1              2              3              4              5         GRAND RANGE      =    2652145.00
  .
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  3.23     42 I  0.38      5 I  4.45     58 I  3.53     46 I  0.92     12 I 12.52     163 M =    36025.66
 1 I  3904025.00  I   134975.00  I  1056769.00  I   685809.00  I    50604.00  I  5872182.00  S =    71107.55
   I    0   14.17 I    0    0.49 I    0    3.84 I    0    2.49 I    0    0.33 I    0    21.32 R =   727668.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  1.54     20 I  0.        0 I  1.69     22 I 14.67    191 I 17.05    222 I 34.95     455 M =     7981.96
 2 I   483149.00  I       0.     I   143971.00  I  2101096.00  I   903578.00  I  3631794.00  S =    10514.27
   I    0    1.75 I    0    0.   I    0    0.52 I    0    7.63 I    0    3.28 I    0    13.19 R =    79675.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  5.84     76 I  1.38     18 I  9.06    118 I  4.92     64 I  2.00     26 I 23.20     302 M =    38229.44
 3 I  7733784.00  I  1172803.00  I  1756841.00  I   761450.00  I   120373.00  I 11545251.00  S =   162302.11
   I    0   28.08 I    0    4.26 I    0    6.38 I    0    2.76 I    0    0.44 I    0    41.92 R =  2651640.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  0.38      5 I  0.        0 I  0.23      3 I  5.53     72 I  6.53     85 I 12.67     165 M =     7337.22
 4 I   131455.00  I       0.     I    14978.00  I   716644.00  I   347564.00  I  1210641.00  S =    10667.26
   I    0    0.48 I    0    0.   I    0    0.05 I    0    2.60 I    0    1.26 I    0     4.40 R =    84626.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  1.00     13 I  0.23      3 I  2.61     34 I  1.00     13 I  0.31      4 I  5.15      67 M =    54832.85
 5 I  1658191.00  I   134507.00  I  1510469.00  I   353281.00  I    17353.00  I  3673801.00  S =    67815.05
   I    0    6.02 I    0    0.49 I    0    5.48 I    0    1.28 .    0    0.06 I    0    13.34 R =   342923.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  0.        0 I  0.        0 I  0.        0 I  5.38     70 I  6.14     80 I 11.52     150 M =    10734.74
 6 I       0.     I       0.     I       0.     I  1124881.00  I   485330.00  I  1610211.00  S =    13266.35
   I    0    0.   I    0    0.   I    0    0.   I    0    4.08 I    0    1.76 I    0     5.85 R =    86071.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I

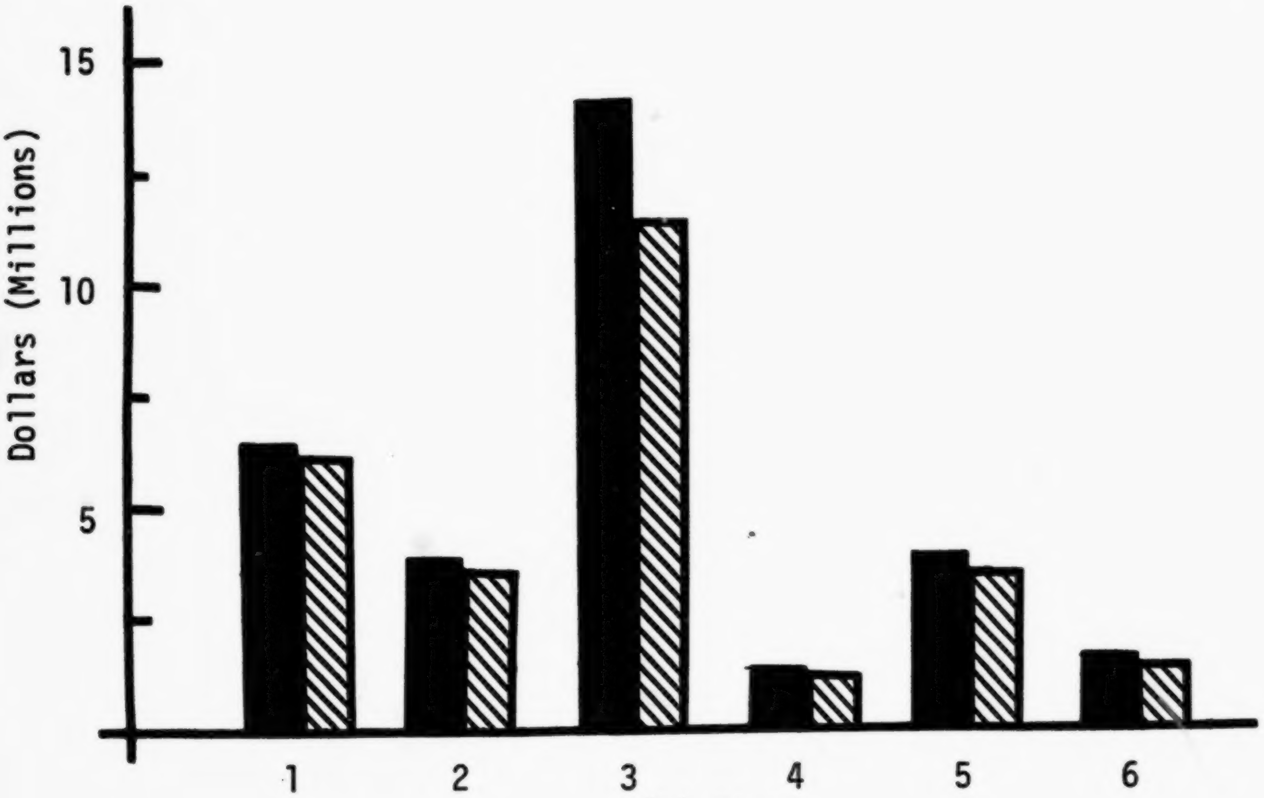
    11.98     156   2.00      26   18.05     235   35.02     456   32.95     429       100.00    1302
   13910604.00      1442285.00      4483028.00      5743201.00      1964802.00          27543920.00
       0   50.50       0    5.24       0   16.28       0   20.85       0    7.13            0  100.00

  M =    89170.54 M =    55472.50 M =    19076.71 M =    12594.74 M =     4579.96       M =    21155.08
  S =   230066.34 S =    56946.83 S =    26703.62 S =    14045.41 S =     4872.58       S =    65461.27
  R =  2650125.00 R =   155720.00 R =   218930.00 R =    66419.00 R =    52523.00       R =  2652145.00
```

FIG. III.4 MAXIMUM BASIC GRANTS TO PARTICIPANTS COMPARED TO AMOUNT APPROVED



(a) SMSA



(b) State

reading projects, for example, (see Figure III.5) suggests that the need for additional programs in reading was greater than in most other areas.

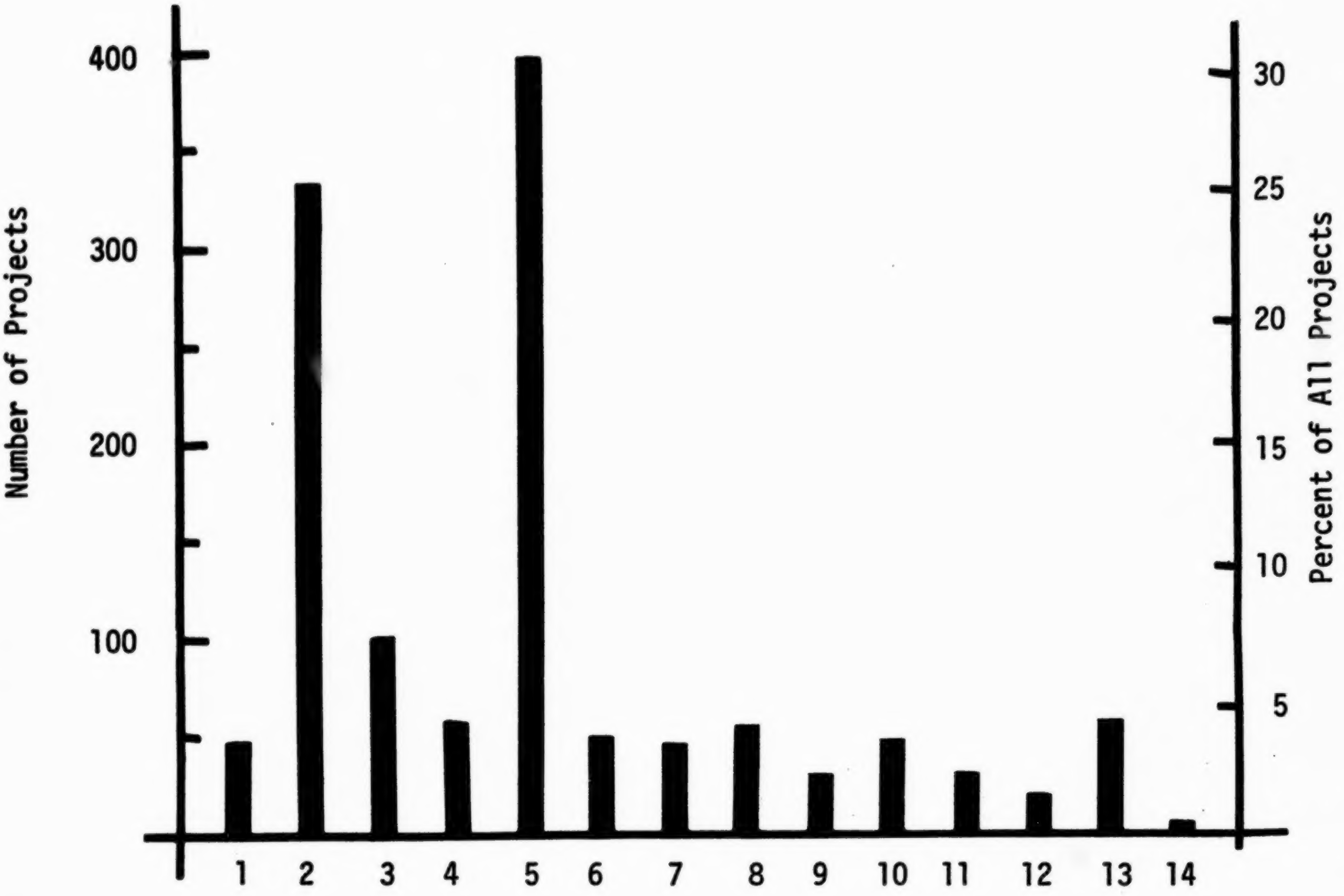
Each project was assigned to one of sixty-seven (67) predetermined categories and then placed accordingly into one of fourteen major project types to permit broader and more manageable classification. These fourteen major project types as well as state and SMSA variables are the primary variables used in the statistical presentations in this report. Code numbers rather than names generally identify the variables. Chapter II, pages 20-30, explains the coding systems in detail, but on the back of many of the figures and tables is a key translating the codes for project type, state, and SMSA.

The distribution of the 1302 projects by major project type, state, and SMSA is presented in Figure III.5. Figure III.6 presents the distribution of approved funds by the same three variables, and Table III.18 illustrates in computer display the spread of the approved funds and the numbers of projects by major project type and SMSA. Row and column statistics in Table III.18 indicate the mean approved grant sizes for project types and SMSAs; "General Remedial" (#5) programs had the highest mean grants followed by "Library" (#12) and "School Readiness" (#8) projects. The mean for "General Remedial" is particularly high because of a few large projects of that type in SMSA #1. Mean grants by SMSA decrease with the degree of urbanization. The percentages of all projects and all approved funds are compared in Figure III.7. The two distribution patterns by project type are roughly similar; that is, the high proposed expenditures for "Reading" (#2) and "General Remedial" (#5) projects correspond to the large numbers of projects of these types. The percent of money approved exceeds the percent of projects in project groups with high budgets; the reverse pattern occurs in groups for which the mean approved grant size falls below the overall average. The SMSA pattern of high urban project budgets and low budgets in rural LEAs affects the state distribution. The three rural states, Maine (#2), New Hampshire (#4), and Vermont (#6) have higher percentages of projects than approved funds and lower budget averages.

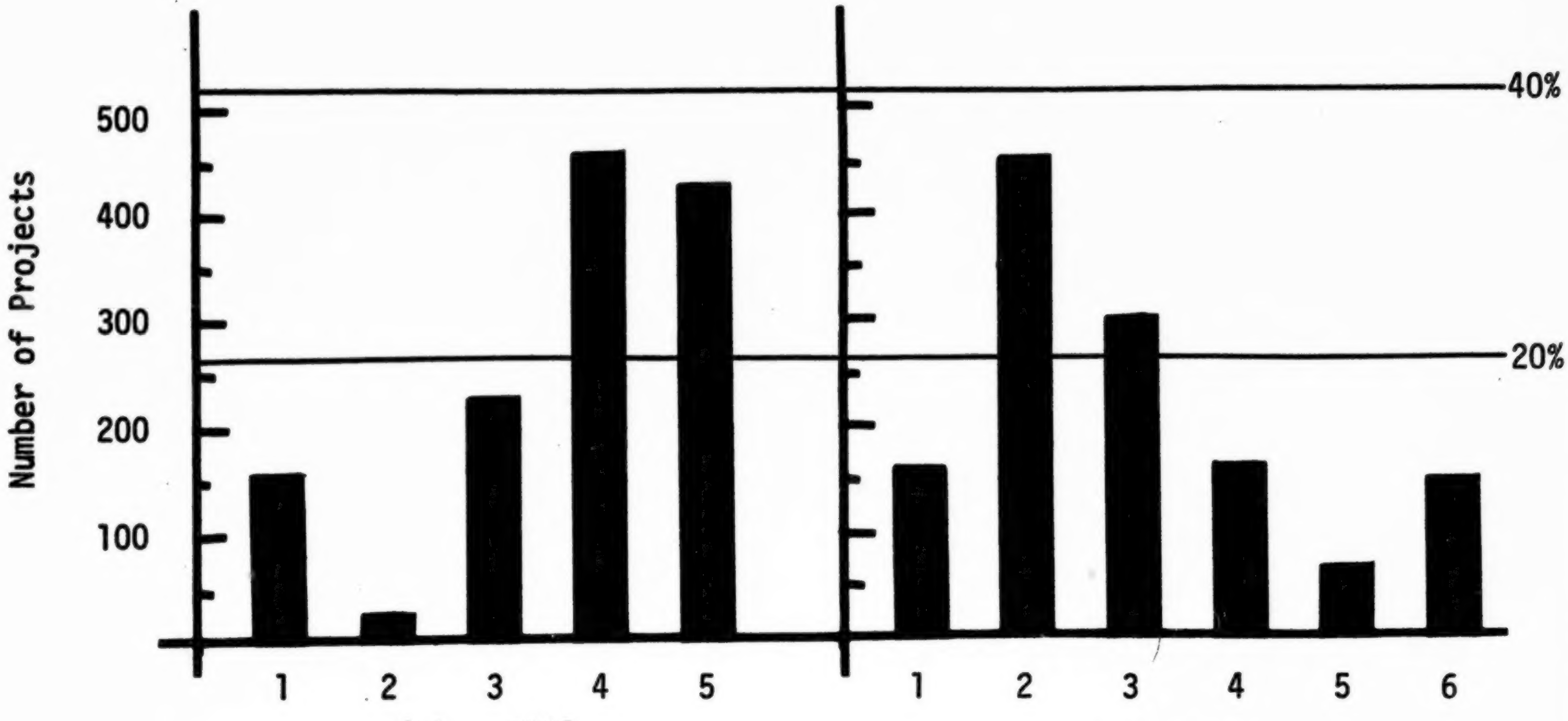
To gauge the potential impact of the approved funds, budget size and project enrollment should be considered together. Proposed enrollment totals are presented in Figure III.8 and average enrollments in Figure III.9. From mean enrollments and approved budgets, the proposed average expenditure per pupil has been calculated for project types, states and SMSAs. These are found in Figure III.10. Suburban LEAs in SMSA #3 where local expenditures per pupil are already the highest also proposed to spend more Title I funds per project child than the other LEA groups. "Special Classes" (#7) and "School Readiness" (#8) projects proposed the highest expenditures per pupil. This trend is reasonable considering that programs of these types have small classes that meet for several hours daily and have therefore high expenses for teachers' salaries. Most other projects are less concentrated in that project staff are more likely to meet several different groups of students during a day or to spend only a portion of their time on Title I project activities. The most obvious example is in "Instructional Services" (#4) projects. Here, when a teacher aide assists in several classes the expenditure per pupil becomes relatively small.

FIG. III.5 TOTAL NUMBER OF PROJECTS (Application Data)

N = 1302



(a) Project Type

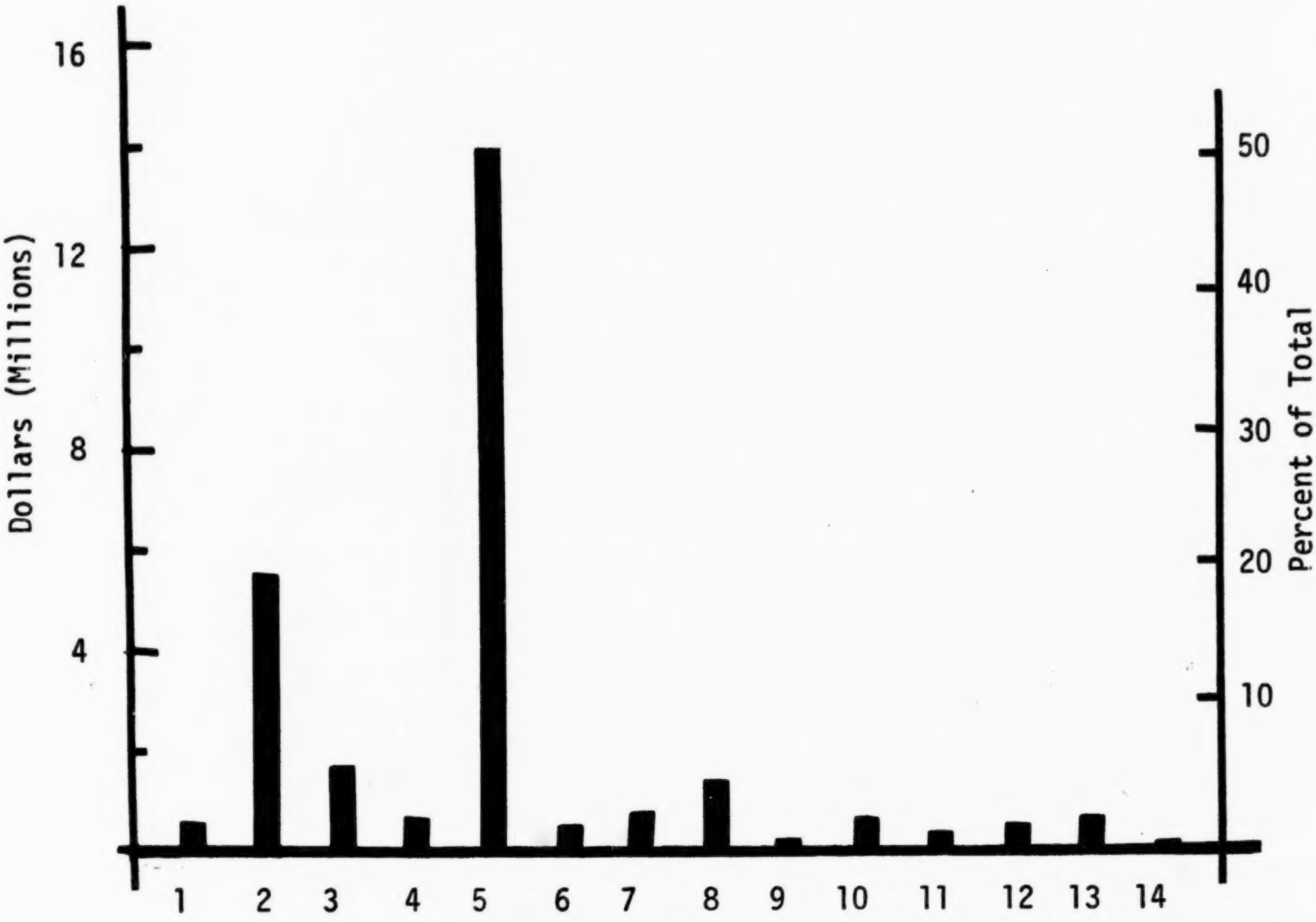


(b) SMSA

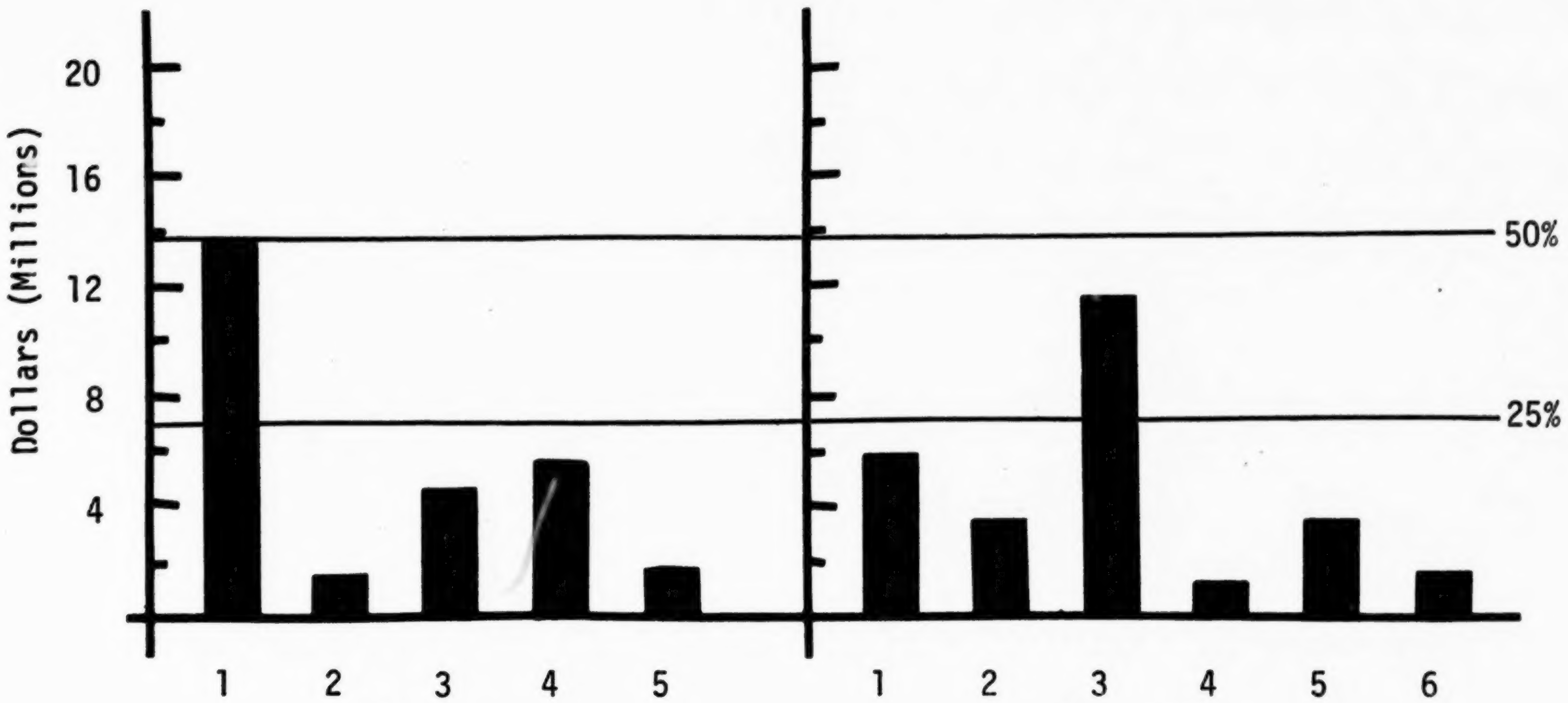
(c) State

FIG. III.6 TOTAL AMOUNT APPROVED (Application Data)

Total: $ 27,543,920



(a) Project Type



(b) SMSA

(c) State

Major Variable Codes

Code	Major Project Type
1	Academic Instruction
2	Reading
3	Language Arts
4	Instructional Services
5	General Remedial
6	Vocational
7	Special Classes
8	School Readiness
9	Materials and Equipment
10	Guidance and Psychological Services
11	Non-Academic Services to Pupils
12	Library
13	Non-Academic Enrichment Activities
14	In-Service Training

Code	State
1	Connecticut
2	Maine
3	Massachusetts
4	New Hampshire
5	Rhode Island
6	Vermont

Code	SMSA
1	Metropolitan - core city
2	Metropolitan - more than 50,000
3	Metropolitan - less than 50,000
4	Non-Metropolitan - more than 2,500
5	Non-Metropolitan - less than 2,500

```
CROSS-TABULATION FOR TITLE I APPLICATIONS DATA                TABLE NO. III.18

  THE TABULATED VARIABLE IS TOTAL AMOUNT APPROVED      UNITS ARE DOLLARS         GRAND COUNT      =          1302
                                                                                 GRAND MISSES     =             0
  SMSA TYPE ACROSS BY MAJOR PROJECT TYPE DOWN                                    GRAND TOTAL      =   27543520.00
                                                                                 GRAND MEAN       =      21155.08
                                                                                 GRAND STD. DEV.  =      65481.27
*       1              2              3              4              5            GRAND RANGE      =    2692145.00
 *
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.38       5 I 0.         0 I 0.61       8 I 1.15      15 I 1.54      20 I  3.69       48 M =   10750.81
 1 I  188674.00   I      0.      I   83409.00   I  180604.00   I   63352.00   I  516039.00  S =   18268.82
   I   0     0.68 I   0      0.  I   0     0.30 I   0     0.66 I   0     0.23 I   0    1.87 R =  113098.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 1.77      23 I 0.31       4 I 4.53      59 I 9.68     126 I 9.29     121 I 25.58     333 M =   17065.20
 2 I 1598569.00   I  496605.00   I 1682263.00   I 1297364.00   I  607911.00   I 5682712.00  S =   35587.26
   I   0     5.80 I   0     1.80 I   0     6.11 I   0     4.71 I   0     2.21 I   0   20.63 R =  343796.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.77      10 I 0.08       1 I 1.77      23 I 3.00      39 I 2.30      30 I  7.91      103 M =   17031.29
 3 I  749777.00   I   35957.00   I  294826.00   I  530041.00   I  143622.00   I 1754223.00  S =   31701.95
   I   0     2.72 I   0     0.13 I   0     1.07 I   0     1.92 I   0     0.52 I   0    6.37 R =  244796.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.38       5 I 0.08       1 I 0.31       4 I 1.23      16 I 3.07      40 I  5.07       66 M =    9431.89
 4 I  343179.00   I   11254.00   I   57310.00   I   97847.00   I  112915.00   I  622505.00  S =   21905.53
   I   0     1.25 I   0     0.04 I   0     0.21 I   0     0.36 I   0     0.41 I   0    2.26 R =  152066.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 4.07      53 I 0.69       9 I 6.68      87 I 10.06    131 I 9.06     118 I 30.57     398 M =   35053.57
 5 I 8474967.00   I  611500.00   I 1648405.00   I 2558606.00   I  657844.00   I 13951322.00 S =  146521.55
   I   0    30.77 I   0     2.22 I   0     5.98 I   0     9.29 I   0     2.39 I   0   50.65 R = 2692052.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.46       6 I 0.15       2 I 0.38       5 I 2.15      28 I 0.69       9 I  3.84       50 M =    9005.04
 6 I   64059.00   I   22642.00   I   30370.00   I  286481.00   I   46700.00   I  450252.00  S =    8305.41
   I   0     0.23 I   0     0.08 I   0     0.11 I   0     1.04 I   0     0.17 I   0    1.63 R =   35247.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.46       6 I 0.08       1 I 0.46       6 I 1.69      22 I 0.69       9 I  3.38       44 M =   15242.61
 7 I  393307.00   I    6961.00   I  100338.00   I  140148.00   I   29921.00   I  670675.00  S =   29795.03
   I   0     1.43 I   0     0.03 I   0     0.36 I   0     0.51 I   0     0.11 I   0    2.43 R =  166151.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.77      10 I 0.15       2 I 1.54      20 I 1.00      13 I 1.15      15 I  4.61       60 M =   24207.12
 8 I  870495.00   I  147621.00   I  269523.00   I  101346.00   I   63442.00   I 1452427.00  S =   45802.01
   I   0     3.16 I   0     0.54 I   0     0.98 I   0     0.37 I   0     0.23 I   0    5.27 R =  267153.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
```

CROSS-TABULATION FOR TITLE I APPLICATIONS DATA   TABLE NO. III.18

```
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.15       2 I 0.08       1 I 0.15       2 I 0.38       5 I 1.38      18 I  2.15       28 M =     4433.43
 9 I  38985.00    I   2200.00    I  15854.00    I  30826.00    I  36271.00    I   124136.00   S =     6155.58
   I   0     0.14 I   0     0.01 I   0     0.06 I   0     0.11 I   0     0.13 I    0     0.45 R =    31093.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.61       8 I 0.08       1 I 0.69       9 I 1.61      21 I 0.61       8 I  3.61       47 M =    14009.32
10 I  284230.00   I   16560.00   I  118705.00   I  209460.00   I  29483.00    I   658438.00   S =    18006.11
   I   0     1.03 I   0     0.06 I   0     0.43 I   0     0.76 I   0     0.11 I    0     2.39 R =    99154.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.38       5 I 0.         0 I 0.08       1 I 1.00      13 I 0.84      11 I  2.30       30 M =     7515.47
11 I  51545.00    I        0.    I  47863.00    I  84316.00    I  41740.00    I   225464.00   S =     9090.71
   I   0     0.19 I   0     0.   I   0     0.17 I   0     0.31 I   0     0.15 I    0     0.82 R =    47443.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.15       2 I 0.08       1 I 0.15       2 I 0.61       8 I 0.54       7 I  1.54       20 M =    25068.60
12 I  305165.00   I   41610.00   I  31656.00    I  99681.00    I  23260.00    I   501372.00   S =    53025.96
   I   0     1.11 I   0     0.15 I   0     0.11 I   0     0.36 I   0     0.08 I    0     1.82 R =   244713.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 1.31      17 I 0.15       2 I 0.61       8 I 1.31      17 I 1.54      20 I  4.92       64 M =    11688.55
13 I  399738.00   I   38075.00   I  99506.00    I  109181.00   I  101567.00   I   748067.00   S =    16542.63
   I   0     1.45 I   0     0.14 I   0     0.36 I   0     0.40 I   0     0.37 I    0     2.72 R =    99148.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.31       4 I 0.08       1 I 0.08       1 I 0.15       2 I 0.23       3 I  0.84       11 M =    16935.27
14 I  147914.00   I   11300.00   I   3000.00    I  17300.00    I   6774.00    I   186288.00   S =    19739.79
   I   0     0.54 I   0     0.04 I   0     0.01 I   0     0.06 I   0     0.02 I    0     0.68 R =    70526.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I

    11.98     156   2.00       26  18.05     235  35.02     456  32.95     429        100.00   1302
   13910604.00     1442285.00      4483028.00      5743201.00      1964802.00          27543920.00
      0    50.50      0    5.24      0   16.28      0   20.85      0    7.13              0 100.00

   M =   89170.54 M =   55472.50 M =   19076.71 M =   12594.74 M =    4579.96       M =   21155.08
   S =  230066.35 S =   56946.83 S =   26703.62 S =   14045.41 S =    4872.58       S =   85481.27
   R = 2690125.00 R =  195720.00 R =  218930.00 R =   86419.00 R =   52523.00       R = 2692145.00
```

FIG. III.7 PERCENT OF PROJECTS COMPARED TO PERCENT OF MONEY APPROVED

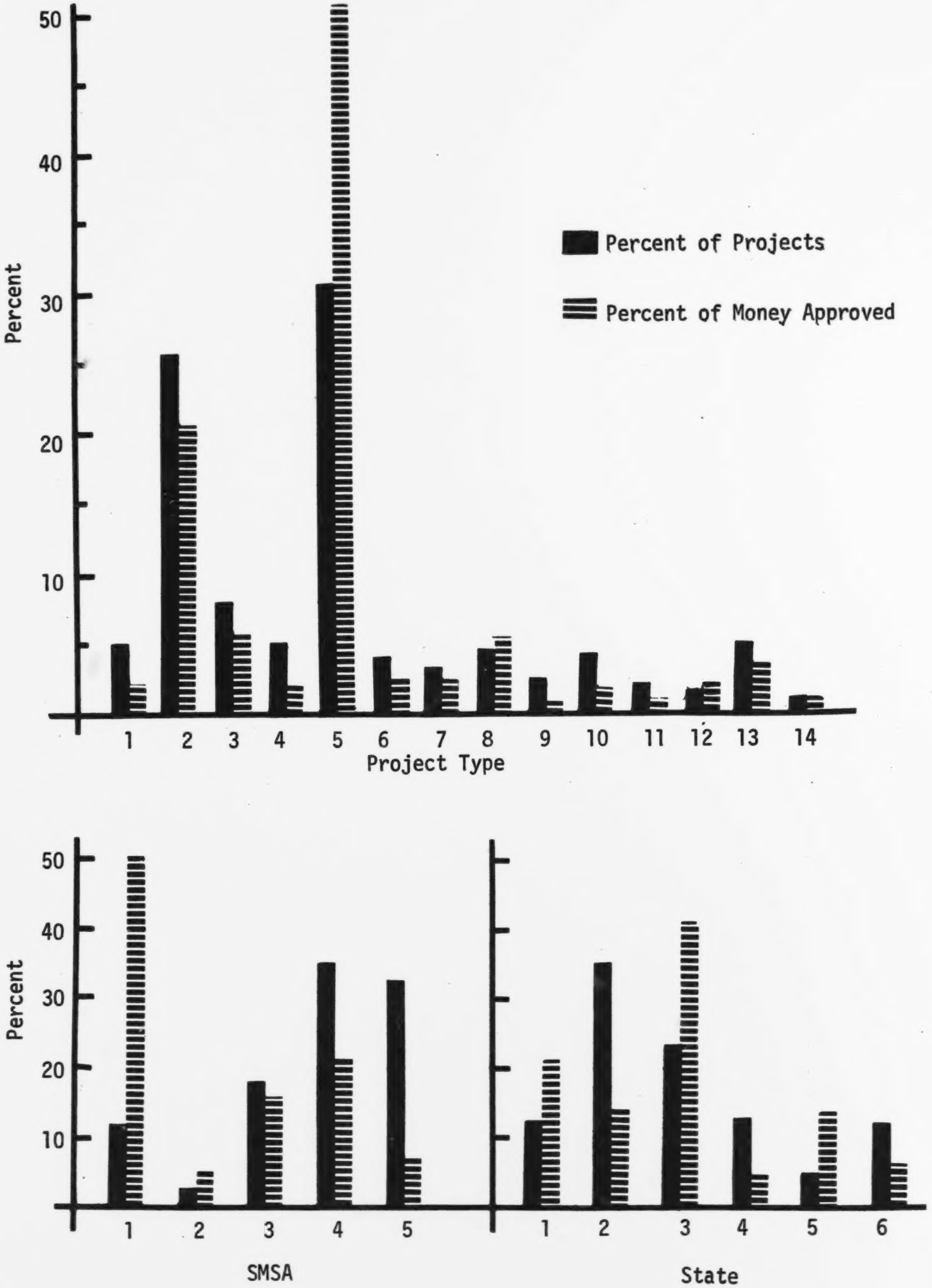
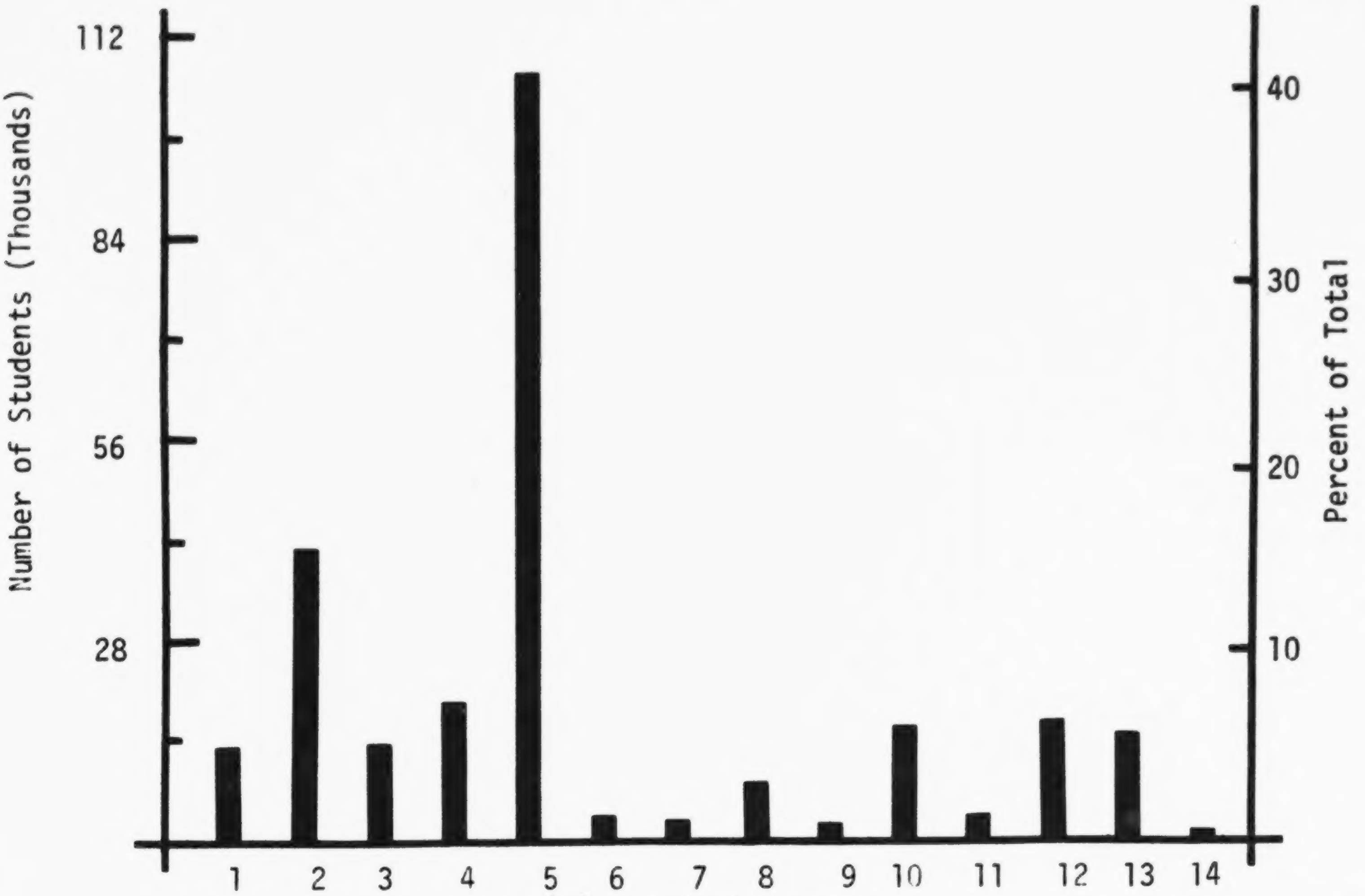
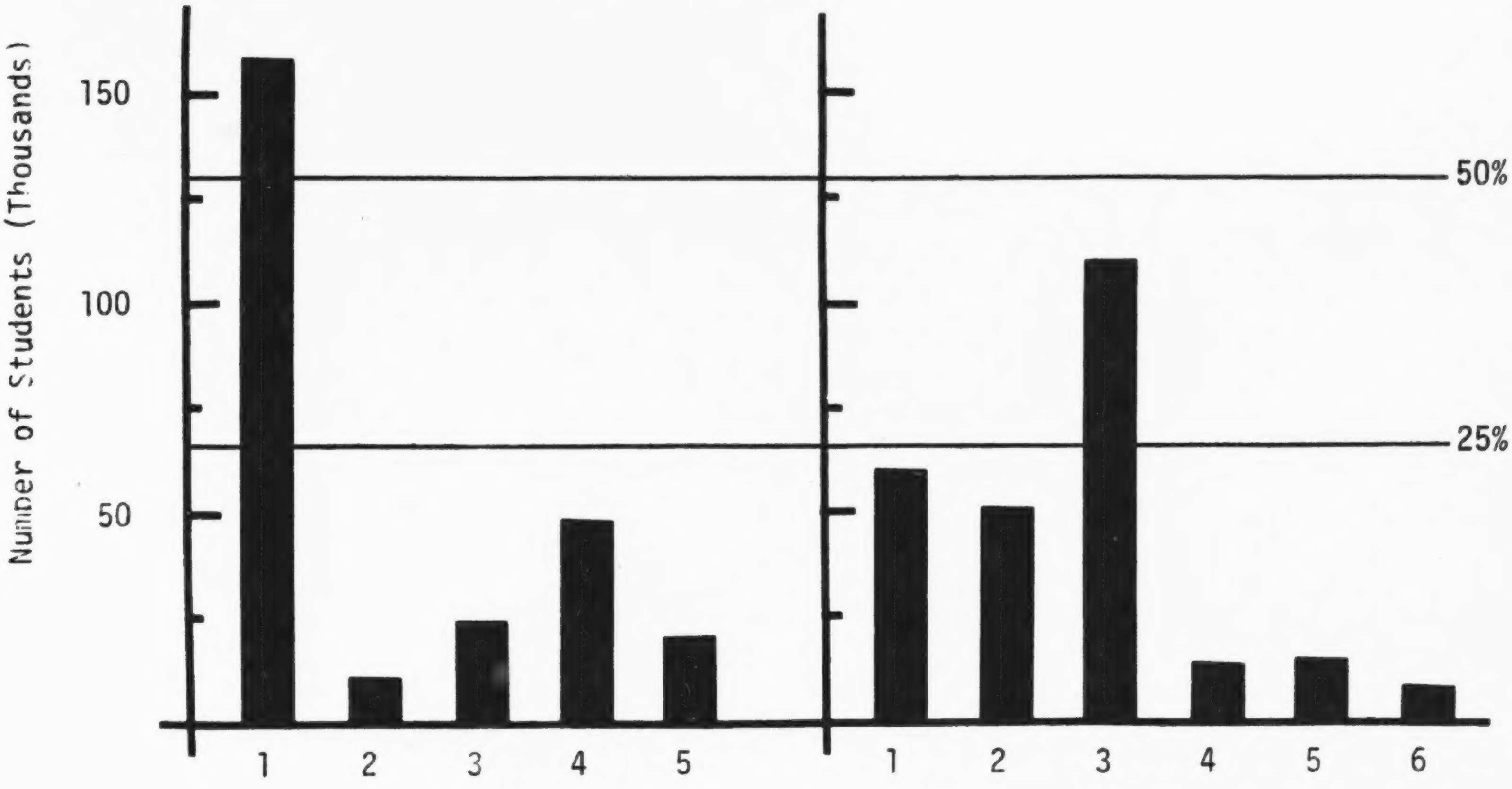


FIG. III.8 TOTAL STUDENT PARTICIPANTS (Application Data)

N = 260,195



(a) Project Type

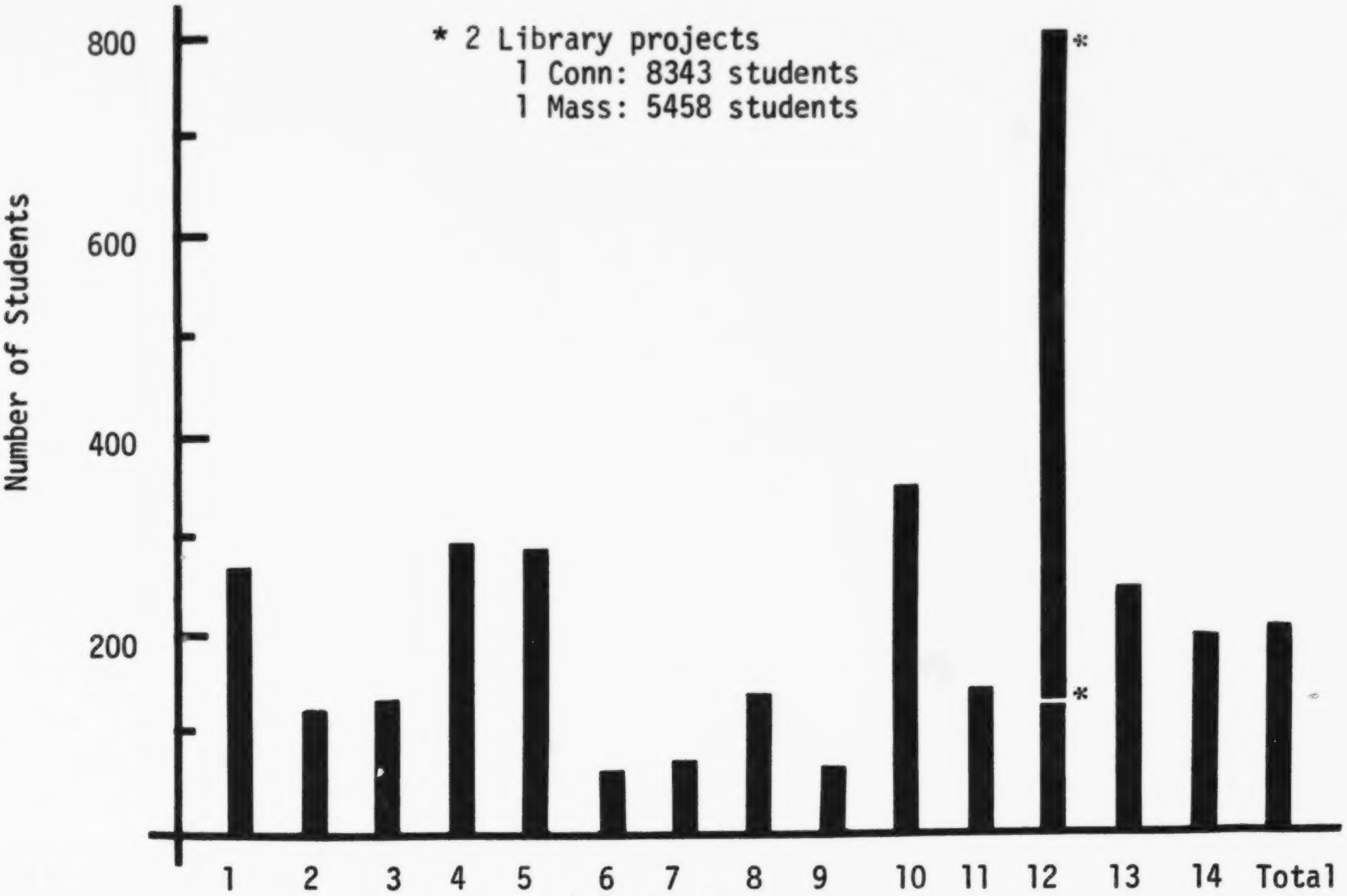


(b) SMSA

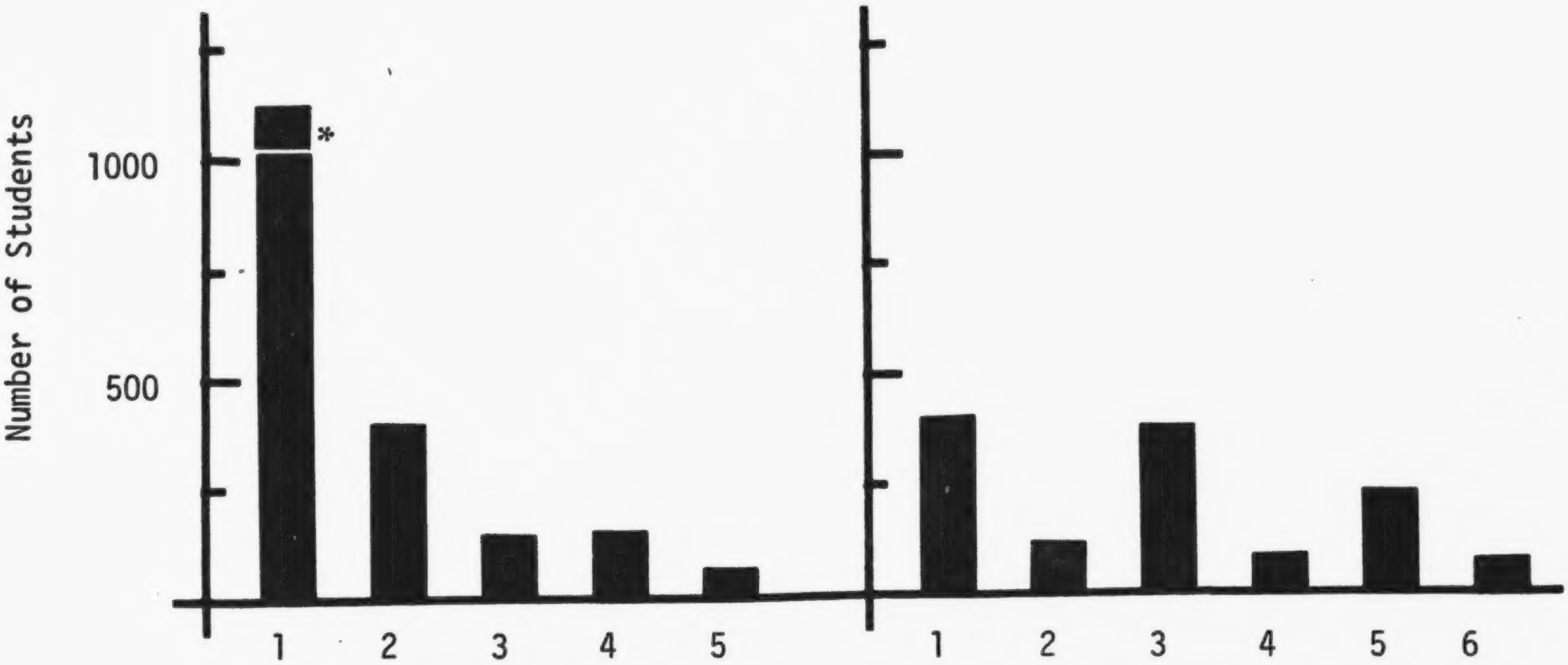
(c) State

FIG. III.9 AVERAGE PROJECT ENROLLMENT (Application Data)

No. Students = 260,512
No. Projects = 1,268



(a) Project Type

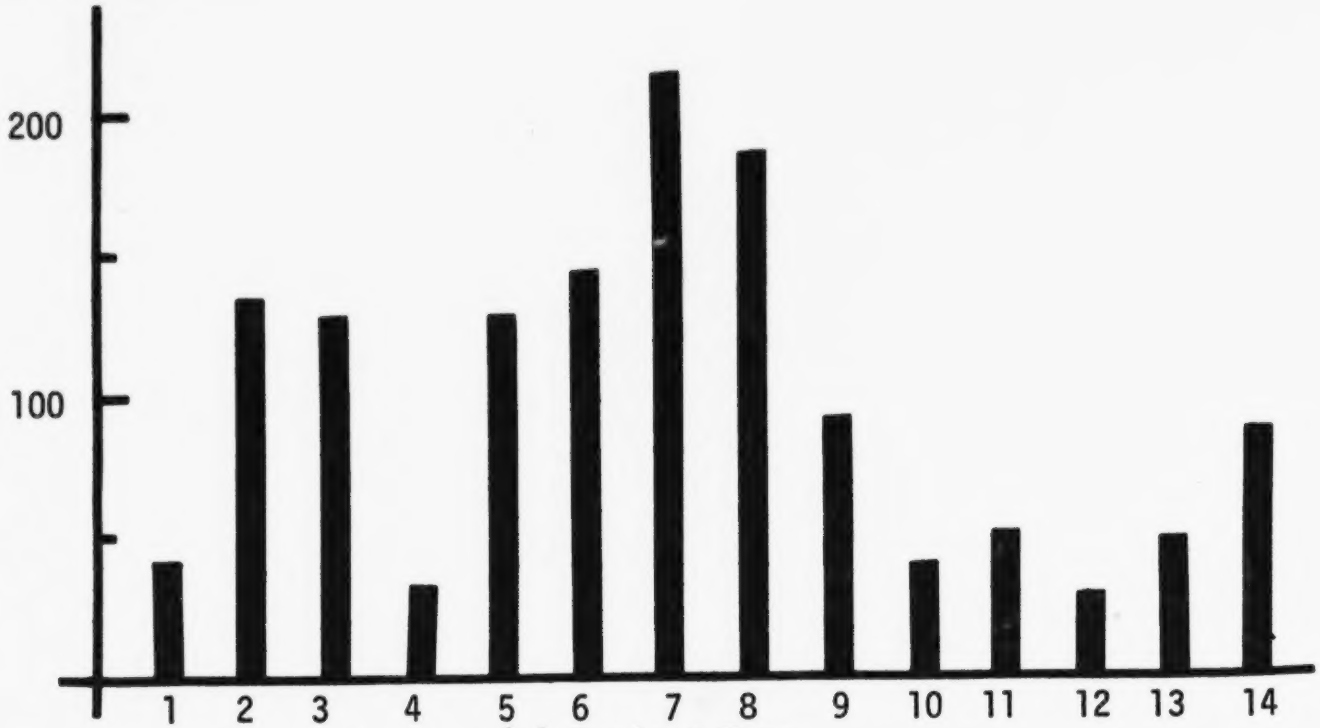


(b) SMSA

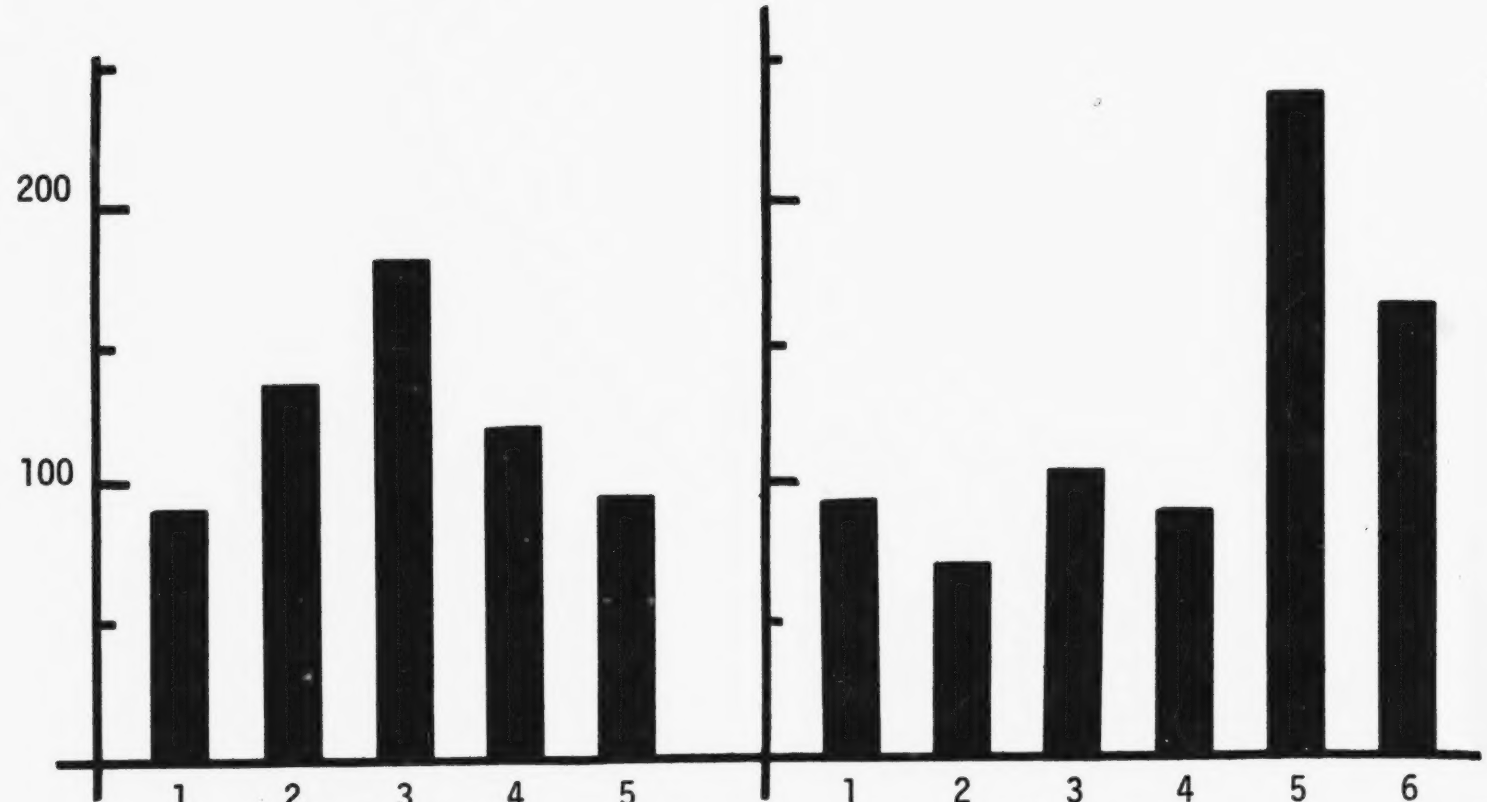
(c) State

FIG. III.10 AVERAGE PROPOSED EXPENDITURE PER PUPIL

(Application Data)



(a) Project Type



(b) SMSA

(c) State

Unfortunately, the individual budget categories presented in the applications were less useful than they first appeared. In many cases, the proposed budgets had been extensively revised. Not only were the figures difficult to read, but often the sum of the line items did not agree with the total amount recorded as finally approved. Because these data proved unreliable, it was not feasible to study the proposed expenditure patterns in detail by budget categories. Nonetheless, a tally was made of the number and percentage of the 1302 projects proposing any expenditures in the various line item categories. This information for all projects is presented in Table III.19. It is interesting to note that while an expected 91% of all projects proposed expenditures for "Instruction," the number of projects proposing expenditures in categories less directly related to student instruction was relatively high. Seventeen percent (17%) of the projects proposed some expenditures for "Fixed Charges," nearly 13% for "Plant Maintenance," 18% for "Plant Operation," and 39% for "Transportation." The number of projects proposing non-instructional expenditures suggests that Title I funds are viewed as useful and usable in most areas of school operation.

The major project type did have some affect upon budget patterns although these variations among project types seem appropriate. Seventy-eight percent (78%) of "School Readiness" (#3) projects proposed transportation expenditures compared to 39% overall. Fifty-two percent (52%) of "School Readiness" projects compared to the overall 25% budgeted in the "Health" category. Comparatively few "Materials and Equipment" (#9) projects proposed expenditures in categories other than "Instruction" (50%) or "Equipment (79%). Even then, they were 41% below the overall percentage in "Instruction" and only 10% higher than the overall in "Equipment." "General Remedial" projects, usually the largest and most broadly defined programs, were 13% higher than the total population in proposed expenditures for "Administration." Otherwise, project type patterns without the actual budget amounts are not particularly informative.

The states themselves do not appear to differ importantly in their budget patterns except in the number of categories used by the average project. The following table indicates by state and SMSA the average number of categories used in the proposed project budgets.

TABLE III.20

Connecticut	4.2	SMSA 1	4.9
Maine	3.0	SMSA 2	5.6
Massachusetts	5.1	SMSA 3	4.8
New Hampshire	2.7	SMSA 4	3.9
Rhode Island	6.0	SMSA 5	3.0
Vermont	4.5		

The variation may be a result of differing state department interpretations of the function of Title I funds. Yet, the pattern for SMSAs suggests that rural LEAs in SMSA 4 and 5 proposed less complicated budgets than did the more metropolitan LEAs. To some extent then, the state pattern may actually be reflecting degree of urbanization rather than state administration policies. Rural projects had initially small

TABLE III.19 PERCENTAGE OF PROJECTS PROPOSING TITLE I EXPENDITURES IN BUDGET CATEGORIES

BUDGET CATEGORY	PROJECTS PROPOSING EXPENDITURES IN BUDGET CATEGORY NO.	PERCENT	PERCENT OF ALL PROJECTS PROPOSING EXPENDITURES FOR SALARIES	OTHER
100 Administration	610	47.0%	43.9%	19.6%
200 Instruction	1183	91.2	86.1	64.3
300 Attendance	47	3.6	3.2	1.2
400 Health	321	24.7	20.0	11.5
500 Transportation	501	38.6	15.5	28.6
600 Operation	235	18.1	11.7	10.7
700 Maintenance	167	12.8	10.2	4.7
800 Fixed Charges	226	17.4	6.2	11.4
900 Food Services	201	15.4	5.0	13.7
1000 Student Body Activities	109	8.4	3.0	6.3
1100 Community Services	42	3.2	1.8	1.6
1220 Remodeling	176	13.5	4.4	10.6
1230 Equipment	894	68.9	11.8	57.4
Other	340	26.2	13.6	14.4
1210A-1230 Construction	56	4.3	-	-
Total	1302	100.0%	92.2%	88.0%

amounts of money with which to work and therefore may have been reluctant to diffuse these funds on a variety of small expenditures. Urban LEAs with larger total budgets could better afford to diversify their expenditures without substantially decreasing the dollar amounts to be spent in areas of primary need. Again, these indices reflect only the disposition of LEAs to use funds for various purposes; the extent of proposed expenditures by line item category cannot be determined without accurate budget amounts.

CHAPTER IV

FINDINGS : FY66 PROJECT ACTIVITIES

The information on the content and organization of the New England FY66 Title I projects has been drawn from two sources. The project application forms provided data on the substance of the activities as planned by the LEAs. The post-project evaluation forms furnished data on what in fact took place as projects when plans were implemented. The application forms, because they were standardized, and because they were relatively detailed and structured in their format, provided more extensive quantitative information than did the evaluation reports. Obviously, the data from the applications are only hypothetical; they indicate how the LEAs hoped to use their funds. While the plans presented by the LEAs were undoubtedly somewhat tempered by the staff, time, and funds available to them, they had not yet been affected by unforeseen practical difficulties of operation. To that extent the project applications offer indices of what educational needs the LEAs considered most critical and of how they hoped to meet these needs.

Ideally, the evaluation reports would compliment the applications to provide a picture of how Title I was implemented and of the extent to which proposed plans were realized. For FY66, however, there were few items of post-project information collected in common in all six states, let alone collected in a form comparable to the application data. As a result, the potential impact of Title I, in terms of anticipated project enrollment, organization, and project content, is better documented than the actual projects themselves.

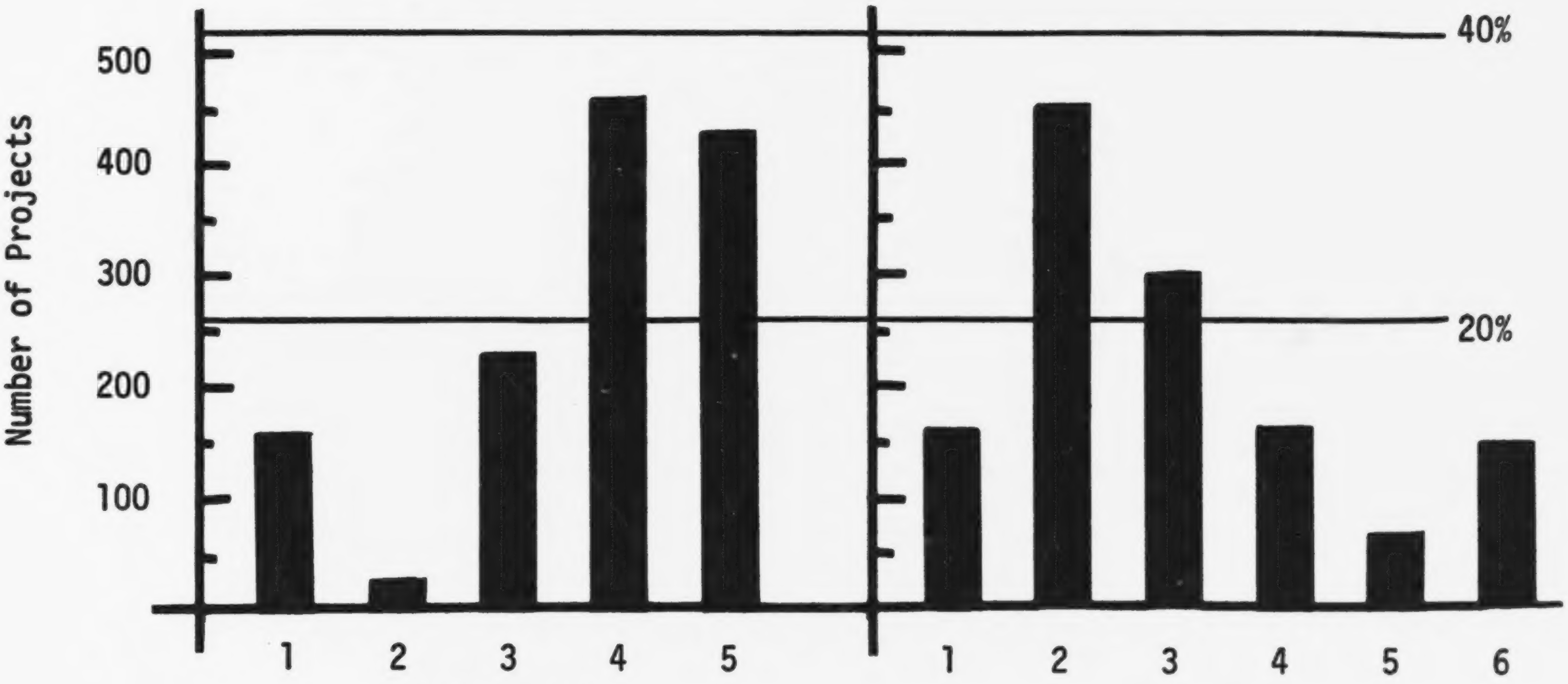
IV.1 DISTRIBUTION OF FY66 PROJECTS

IV.1.1 Geographic Distribution

The distributions of the 1302 projects for which the NEEDS study received approved project applications are presented in Figure IV.1 broken down for the six states, the five community types (SMSAs), and the fourteen project types. Table IV.1 illustrates the spread of these projects cross-tabulated by SMSA and state; Tables IV.2 and IV.3 locate the projects in their appropriate SMSA and state cells according to project type. (The reader is referred to Chapter II, page 31, for instructions on reading the displays.) The greatest number of projects (885 or 68%) are found in the more rural communities (SMSAs #4 and #5). These are largely contributed by the state of Maine which itself is pri-

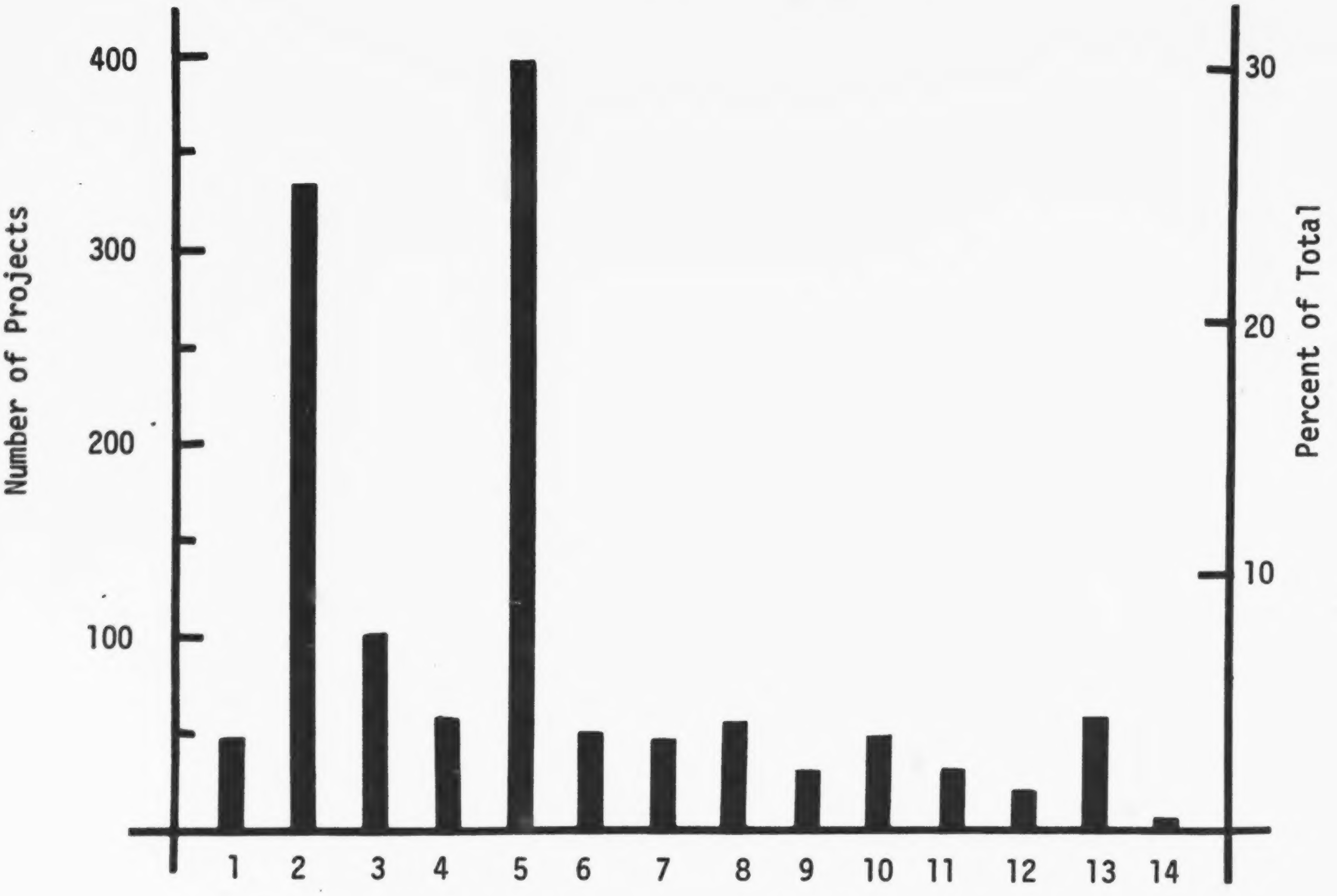
FIG. IV.1 TOTAL NUMBER OF PROJECTS (Application Data)

N = 1302



(a) SMSA

(b) State



(c) Project Type

Major Variable Codes

Code	Major Project Type
1	Academic Instruction
2	Reading
3	Language Arts
4	Instructional Services
5	General Remedial
6	Vocational
7	Special Classes
8	School Readiness
9	Materials and Equipment
10	Guidance and Psychological Services
11	Non-Academic Services to Pupils
12	Library
13	Non-Academic Enrichment Activities
14	In-Service Training

Code	State
1	Connecticut
2	Maine
3	Massachusetts
4	New Hampshire
5	Rhode Island
6	Vermont

Code	SMSA
1	Metropolitan - core city
2	Metropolitan - more than 50,000
3	Metropolitan - less than 50,000
4	Non-Metropolitan - more than 2,500
5	Non-Metropolitan - less than 2,500

CROSS-TABULATION FOR TITLE I APPLICATIONS DATA

TABLE NO. IV.1

```
THE TABULATED VARIABLE IS TITLE I PROJECTS          UNITS ARE PROJECTS         GRAND COUNT     =          1302
                                                                               GRAND MISSES    =             0
SMSA TYPE ACROSS BY STATE DOWN                                                 GRAND TOTAL     =       1302.00
                                                                               GRAND MEAN      =          1.00
                                                                               GRAND STD. DEV. =            0.
*       1               2               3               4               5      GRAND RANGE     =            0.
 *
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 3.23       42 I 0.38        5 I 4.45       58 I 3.53       46 I 0.92       12 I 12.52     163 M =         1.00
 1 I       42.00   I        5.00   I       58.00   I       46.00   I       12.00   I      163.00  S =         0.
   I   0     3.23  I   0     0.38  I   0     4.45  I   0     3.53  I   0     0.92  I   0    12.52  R =         0.
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 1.54       20 I 0.          0 I 1.69       22 I 14.67     191 I 17.05     222 I 34.95     455 M =         1.00
 2 I       20.00   I        0.     I       22.00   I      191.00   I      222.00   I      455.00  S =         0.
   I   0     1.54  I   0     0.    I   0     1.69  I   0    14.67  I   0    17.05  I   0    34.95  R =         0.
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 5.84       76 I 1.38       18 I 9.06      118 I 4.92       64 I 2.00       26 I 23.20     302 M =         1.00
 3 I       76.00   I       18.00   I      118.00   I       64.00   I       26.00   I      302.00  S =         0.
   I   0     5.84  I   0     1.38  I   0     9.06  I   0     4.92  I   0     2.00  I   0    23.20  R =         0.
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 0.38        5 I 0.          0 I 0.23        3 I 5.53       72 I 6.53       85 I 12.67     165 M =         1.00
 4 I        5.00   I        0.     I        3.00   I       72.00   I       85.00   I      165.00  S =         0.
   I   0     0.38  I   0     0.    I   0     0.23  I   0     5.53  I   0     6.53  I   0    12.67  R =         0.

   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 1.00       13 I 0.23        3 I 2.61       34 I 1.00       13 I 0.31        4 I 5.15       67 M =         1.00
 5 I       13.00   I        3.00   I       34.00   I       13.00   I        4.00   I       67.00  S =         0.
   I   0     1.00  I   0     0.23  I   0     2.61  I   0     1.00  I   0     0.31  I   0     5.15  R =         0.
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 0.          0 I 0.          0 I 0.          0 I 5.38       70 I 6.14       80 I 11.52     150 M =         1.00
 6 I        0.     I        0.     I        0.     I       70.00   I       80.00   I      150.00  S =         0.
   I   0     0.    I   0     0.    I   0     0.    I   0     5.38  I   0     6.14  I   0    11.52  R =         0.
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I

     11.98     156   2.00       26   18.05     235   35.02     456   32.95     429      100.00   1302
         156.00          26.00          235.00          456.00          429.00              1302.00
       0   11.98     0    2.00     0   18.05     0   35.02     0   32.95              0  100.00
   M =        1.00 M =        1.00 M =        1.00 M =        1.00 M =        1.00      M =         1.00
   S =        0.   S =        0.   S =        0.   S =        0.   S =        0.        S =         0.
   R =        0.   R =        0.   R =        0.   R =        0.   R =        0.        R =         0.
```

```
CROSS-TABULATION FOR TITLE I APPLICATICNS D ATA                          TABLE NO.IV.2

  THE TABULATED VARIABLE IS TITLE I PROJECT S            UNITS ARE PROJECTS          GRANC COUNT      =        1302
                                                                                     GRANC MISSES     =           0
  SMSA TYPE ACROSS BY MAJCR PROJECT TYPE DC  WN                                      GRANC TCTAL      =     1302.CO
                                                                                     GRANC MEAN       =        1.CO
                                                                                     GRANC STD. DEV. =         0.
*        1               2               3          4               5                GRANC RANGE      =        0.
 *
  I---------------I---------------I-------------I---------------I---------------I
  I               I               I             I               I               I
  I 0.38        5 I 0.          0 I 0.61      8 I 1.15       15 I 1,-54      20 I 3.69       48 M =      1.CO
1 I       5.00    I        C.     I      .CO    I      15.00    I      20.CC    I      48.CC  S =      C.
  I   C     0.38  I   C    C.     I   0  80.61  I   0     1.15  I   0     1.54  I  0     3.69 R =      0.
  I               I               I             I               I               I
  I---------------I---------------I-------------I---------------I---------------I
  I               I               I             I               I               I
  I 1.77       23 I 0.31        4 I 4.53     59 I 9.68      126 I 9.29      121 I 25.58     333 M =      1.CO
2 I      23.00    I         4.00  I     .00     I     126.00    I     121.0C    I     333.0C  S =      0.
  I   C     1.77  I   0     0.31  I   0  594.53 I   0     9.68  I   C     9.29  I  0    25.58 R =      0.
  I               I               I             I               I               I
  I---------------I---------------I-------------I---------------I---------------I
  I               I               I             I               I               I
  I 0.77       10 I 0.C8        1 I 1.77     23 I 3.00       39 I 2.3C       30 I 7.91      103 M =      1.0C
3 I      10.00    I         1.00  I     .CO     I      39.00    I      30.CC    I     103.CC  S =      0.
  I   C     0.77  I   C     C.08  I   C  231.77 I   0     3.C0  I   0     2.30  I  0     7.91 R =      0.
  I               I               I             I               I               I
  I---------------I---------------I-------------I---------------I---------------I
  I               I               I             I               I               I
  I 0.38        5 I C.08        1 I 0.31      4 I 1.23       16 I 3.C7       40 I 5.07       66 M =      1.0C
4 I       5.00    I         1.00  I     .00     I      16.00    I      40.0C    I      66.0C  S =      0.
  I   C     0.38  I   0     0.08  I   0   40.31 I   0     1.23  I   C     3.C7  I  0     5.C7 R =      C.
  I               I               I             I               I               I
  I---------------I---------------I-------------I---------------I---------------I
  I               I               I             I               I               I
  I 4.C7       53 I C.69        9 I 6.68     87 I 1C.C6     131 I 9.06      118 I 30.57     398 M =      1.CC
5 I      53.00    I         9.CC  I     7.C0    I     131.C0    I     118.CC    I     398.CC  S =      0.
  I   C     4.07  I   0     0.69  I   C  876.68 I   0    10.C6  I   C     9.C6  I  0    3C.57 R =      0.
  I               I               I             I               I               I
  I---------------I---------------I-------------I---------------I---------------I
  I               I               I             I               I               I
  I 0.46        6 I C.15        2 I 0.38      5 I 2.15       28 I C.69        9 I 3.84       50 M =      1.CC
6 I       6.00    I         2.00  I     .00     I      28.00    I       9.CC    I      50.0C  S =      0.
  I   C     0.46  I   C     C.15  I   0    0.38 I   C     2.15  I   C     C.69  I  0     3.84 R =      C.
  I               I               I             I               I               I
  I---------------I---------------I-------------I---------------I---------------I
  I               I               I             I               I               I
  I 0.46        6 I C.08        1 I 0.46      6 I 1.69       22 I C.69        9 I 3.38       44 M =      1.CC
7 I       6.00    I         1.00  I     .CO     I      22.CC    I       9.CC    I      44.0C  S =      C.
  I   0     0.46  I   0     C.08  I   C    0.46 I   C     1.69  I   C     C.69  I  0     3.38 R =      0.
  I               I               I             I               I               I
  I---------------I---------------I-------------I---------------I---------------I
  I               I               I             I               I               I
  I 0.77       1C I 0.15        2 I 1.54     2C I 1.C0       13 I 1.15       15 I 4.61       60 M =      1.CC
8 I      10.00    I         2.00  I     .CO     I      13.C0    I      15.0C    I      60.0C  S =      0.
  I   0     0.77  I   0     C.15  I   0  201.54 I   C     1.CC  I   C     1.15  I  0     4.61 R =      C.
  I               I               I             I               I               I
  I---------------I---------------I-------------I---------------I---------------I
```

CROSS-TABULATION FOR TITLE I APPLICATIONS DATA   TABLE NO. IV.2 (continued)

```
                                          ---------I--------------I--------------I
   I--------------I--------------I-------          I              I              I
   I              I              I              2 I C.38        5 I 1.38       18 I 2.15     28 M =     1.CC
   I 0.15       2 I 0.08       1 I 0.15  2.00     I         5.CO I        18.CC I        28.0C S =     0.
 9 I         2.00 I         1.CO I       0.15     I   C     0.38 I   0     1.38 I   0     2.15 R =     0.
   I   0     0.15 I   0     0.08 I   0            I              I              I
   I              I              I       ---------I--------------I--------------I
   I--------------I--------------I-------          I              I              I
   I              I              I              9 I 1.61       21 I C.61        8 I 3.61     47 M =     1.CC
   I 0.61       8 I C.08       1 I 0.69  9.CO     I        21.CO I         8.0C I        47.CC S =     0.
1C I         8.CO I         1.0C I       0.69     I   C     1.61 I   C     C.61 I   C     3.61 R =     0.
   I   0     0.61 I   C     0.08 I   0            I              I              I
   I              I              I       ---------I--------------I--------------I
   I--------------I--------------I-------          I              I              I
   I              I              I              1 I 1.CO       13 I C.84       11 I 2.30     30 M =     1.CC
   I 0.38       5 I C.         0 I 0.08  1.00     I        13.00 I        11.00 I        30.0C S =     0.
11 I         5.00 I         0.   I       0.08     I   0     1.00 I   0     C.84 I   0     2.30 R =     0.
   I   C     C.38 I   C     C.   I   0            I              I              I
   I              I              I       ---------I--------------I--------------I
   I--------------I--------------I-------          I              I              I
   I              I              I              2 I 0.61        8 I 0.54        7 I 1.54     2C M =     1.CC
   I 0.15       2 I C.08       1 I 0.15  2.00     I         8.CO I         7.CC I        20.CC S =     0.
12 I         2.00 I         1.CO I       0.15     I   0     0.61 I   C     0.54 I   0     1.54 R =     0.
   I   0     0.15 I   C     C.08 I   0            I              I              I
   I              I              I       ---------I--------------I--------------I
   I--------------I--------------I-------          I              I              I
   I              I              I              8 I 1.31       17 I 1.54       20 I 4.92     64 M =     1.CC
   I 1.31      17 I C.15       2 I 0.61  8.CO     I        17.0C I        20.C0 I        64.00 S =     0.
13 I        17.00 I         2.CO I       0.61     I   C     1.31 I   0     1.54 I   0     4.92 R =     0.
   I   C     1.31 I   C     0.15 I   C            I              I              I
   I              I              I       ---------I--------------I--------------I
   I--------------I--------------I-------          I              I              I
   I              I              I              1 I 0.15        2 I 0.23        3 I 0.84     11 M =     1.CC
   I C.31       4 I 0.08       1 I 0.08  1.C0     I         2.CC I         3.CC I        11.CC S =     C.
14 I         4.CO I         1.CC I       C.08     I   0     0.15 I   C     C.23 I   0     C.84 R =     C.
   I   C     0.31 I   0     C.08 I   0            I              I              I
   I              I              I       ---------I--------------I--------------I
   I--------------I--------------I-------
                                               235    35.C2      456   32.95      429      1CC.CO    13C2
     11.98    156     2.0C      26     18.0 235.CO           456.CC          429.CC            1302.0C
          156.CO           26.00                18.05     0    35.02    C     32.95           C  1CO.CO
        C  11.98       C   2.CO        0
                                               1.CO M =        1.00 M =        1.CC      M =        1.CO
   M =       1.00 M =       1.CO M =           C.   S =        C.   S =        C.        S =        0.
   S =       0.   S =       0.   S =           C.   R =        C.   R =        C.        R =        0.
   R =       0.   R =       0.   R =
                                                                         TABLE NO. IV.3
CROSS-TABULATION FOR TITLE I APPLICATIONS DATA                                                                 GRAND COUNT     =      13C2
                                                         UNITS ARE PROJECTS                                    GRAND MISSES    =         0
 THE TABULATED VARIABLE IS TITLE I PROJECTS                                                                    GRAND TCTAL     =   1302.00
                                                                                                               GRAND MEAN      =      1.C0
 STATE ACRCSS BY MAJCR PROJECT TYPE DOWN                                                                       GRAND STD. DEV. =        C.
                                                             4                5                6               GRAND RANGE     =        0.
*        1                 2                 3
 *
  I---------------I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I C.61        8 I C.31        4 I C.46        6 I 3.69      48 M =        1.CC
  I C.31        4 I 1.46       19 I 0.54        7 I        8.00   I        4.00   I        6.C0   I     48.CC  S =        0.
1 I        4.00   I       19.00   I        7.00   I  0     0.61   I  C     C.31   I  0     C.46   I  0    3.69 R =        0.
  I  C     0.31   I  C     1.46   I  0     0.54   I               I               I               I
  I               I               I               I---------------I---------------I---------------I
  I---------------I---------------I---------------I               I               I               I
  I               I               I               I 4.45       58 I 2.CC       26 I 3.61       47 I 25.58    333 M =        1.CC
  I 1.69       22 I 8.76      114 I 5.07       66 I       58.00   I       26.C0   I       47.CC   I    333.CC  S =        0.
2 I       22.00   I      114.00   I       66.C0   I  0     4.45   I  C     2.C0   I  0     3.61   I  0   25.58 R =        0.
  I  C     1.69   I  C     8.76   I  0     5.07   I               I               I               I
  I               I               I               I---------------I---------------I---------------I
  I---------------I---------------I---------------I               I               I               I
  I               I               I               I 1.15       15 I C.31        4 I 1.08       14 I 7.91     103 M =        1.0C
  I 1.C8       14 I 2.CC       26 I 2.30       30 I       15.00   I        4.00   I       14.C0   I    103.00  S =        0.
3 I       14.00   I       26.00   I       30.00   I  0     1.15   I  C     0.31   I  C     1.C8   I  0    7.91 R =        C.
  I  0     1.08   I  0     2.C0   I  0     2.30   I               I               I               I
  I               I               I               I---------------I---------------I---------------I
  I---------------I---------------I---------------I               I               I               I
  I               I               I               I C.61        8 I C.C8        1 I 0.15        2 I 5.07      66 M =        1.CC
  I 0.54        7 I 3.46       45 I 0.23        3 I        8.C0   I        1.CC   I        2.CC   I     66.CC  S =        0.
4 I        7.C0   I       45.C0   I        3.C0   I  0     0.61   I  C     C.08   I  0     C.15   I  0    5.C7 R =        0.
  I  C     0.54   I  C     3.46   I  0     0.23   I               I               I               I
  I               I               I               I---------------I---------------I---------------I
  I---------------I---------------I---------------I               I               I               I
  I               I               I               I 2.61       34 I 1.C8       14 I 3.C0       39 I 30.57    398 M =        1.CC
  I 5.38       70 I 9.29      121 I 9.22      12C I       34.00   I       14.CC   I       39.C0   I    398.CC  S =        0.
5 I       70.00   I      121.C0   I      120.0C   I  C     2.61   I  C     1.C8   I  C     3.CC   I  0   3C.57 R =        C.
  I  C     5.38   I  C     9.29   I  0     9.22   I               I               I               I
  I               I               I               I---------------I---------------I---------------I
  I---------------I---------------I---------------I               I               I               I
  I               I               I               I C.31        4 I C.          0 I C.C8        1 I 3.84      50 M =        1.CC
  I C.          0 I 2.92       38 I 0.54        7 I        4.00   I        0.     I        1.CC   I     5C.CC  S =        0.
6 I        0.     I       38.C0   I        7.00   I  0     0.31   I  0     0.     I  0     C.08   I  0    3.84 R =        0.
  I  C     0.     I  0     2.92   I  0     0.54   I               I               I               I
  I               I               I               I---------------I---------------I---------------I
  I---------------I---------------I---------------I               I               I               I
  I               I               I               I C.38        5 I C.46        6 I C.46        6 I 3.38      44 M =        1.CC
  I 0.23        3 I 1.61       21 I 0.23        3 I        5.C0   I        6.C0   I        6.CC   I     44.CC  S =        0.
7 I        3.00   I       21.00   I        3.C0   I  0     0.38   I  C     C.46   I  C     C.46   I  C    3.38 R =        C.
  I  0     0.23   I  C     1.61   I  0     0.23   I               I               I               I
  I               I               I               I---------------I---------------I---------------I
  I---------------I---------------I---------------I               I               I               I
  I               I               I               I C.08        1 I C.23        3 I C.61        8 I 4.61      60 M =        1.CC
  I 1.C0       13 I C.92       12 I 1.77       23 I        1.0C   I        3.CC   I        8.CC   I     6C.CC  S =        C.
8 I       13.C0   I       12.0C   I       23.00   I  0     0.08   I  0     0.23   I  C     C.61   I  0    4.61 R =        C.
  I  0     1.00   I  0     C.92   I  0     1.77   I               I               I               I
  I               I               I               I---------------I---------------I---------------I
  I---------------I---------------I---------------I
```

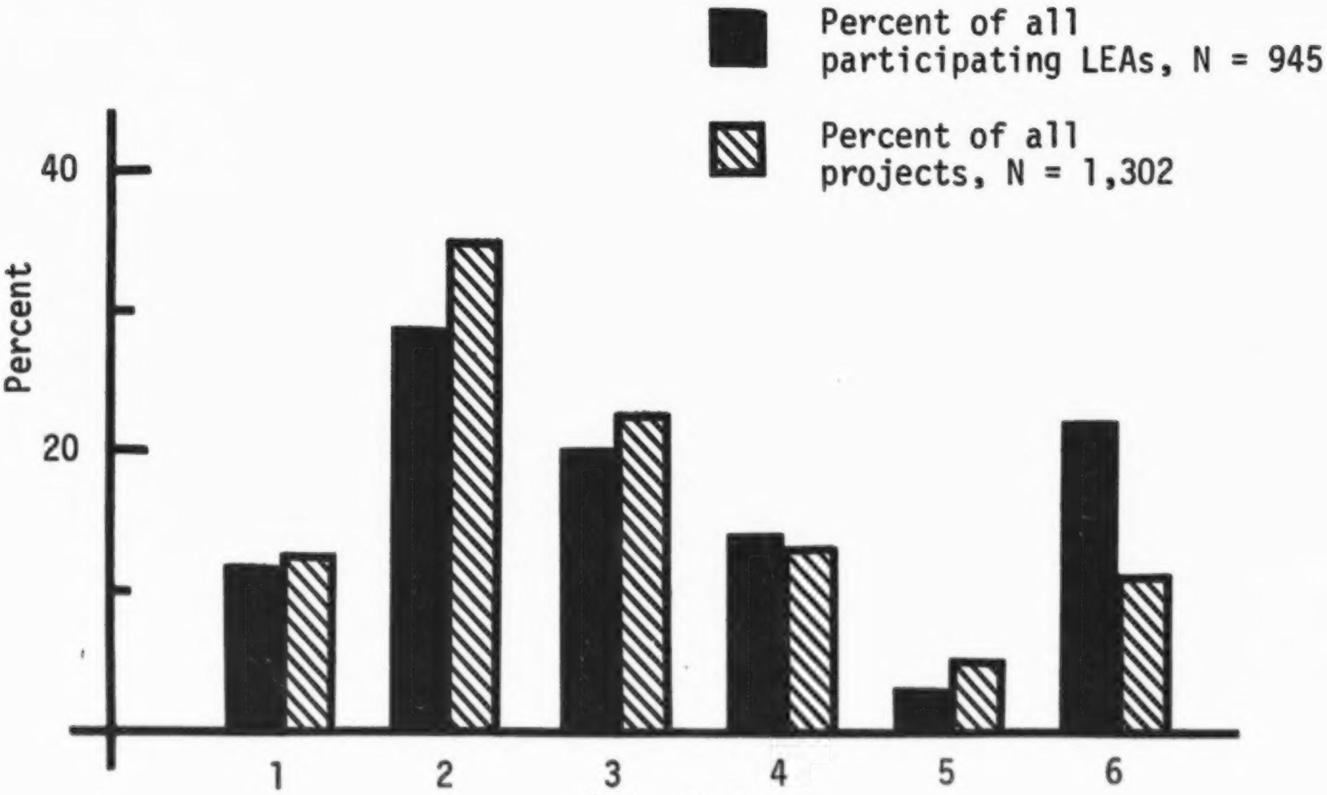
CROSS-TABULATION FOR TITLE I APPLICATICNS DATA TABLE NO. IV.3 (continued)

```
     I-------------I-------------I-------------I-------------I-------------I-------------I
     I             I             I             I             I             I             I
     I 0.38      5 I 1.08     14 I 0.08      1 I 0.54      7 I C.        0 I 0.08      1 I 2.15      28 M =    1.0C
   9 I     5.00    I    14.00    I     1.00    I     7.CO    I     0.      I     1.CC    I     28.CC    S =    0.
     I 0      0.38 I 0      1.08 I 0      0.08 I 0      0.54 I 0      C.   I 0      C.08 I 0      2.15 R =    C.
     I             I             I             I             I             I             I
     I-------------I-------------I-------------I-------------I-------------I-------------I
     I             I             I             I             I             I             I
     I 0.15      2 I 0.46      6 I 1.61     21 I 0.61      8 I C.23      3 I 0.54      7 I 3.61      47 M =    1.0C
  10 I     2.00    I     6.00    I    21.CO    I     8.CO    I     3.0C    I     7.CO    I     47.0C    S =    0.
     I 0      0.15 I 0      C.46 I C      1.61 I C      0.61 I 0      C.23 I 0      0.54 I 0      3.61 R =    0.
     I             I             I             I             I             I             I
     I-------------I-------------I-------------I-------------I-------------I-------------I
     I             I             I             I             I             I             I
     I 0.08      1 I C.77     10 I 0.31      4 I C.38      5 I C.08      1 I 0.69      9 I 2.30      30 M =    1.0C
  11 I     1.00    I    1C.00    I     4.00    I     5.00    I     1.CC    I     9.CO    I     3C.CC    S =    0.
     I 0      C.08 I 0      C.77 I 0      0.31 I 0      0.38 I C      C.08 I C      C.69 I 0      2.30 R =    0.
     I             I             I             I             I             I             I
     I-------------I-------------I-------------I-------------I-------------I-------------I
     I             I             I             I             I             I             I
     I 0.08      1 I C.77     10 I 0.08      1 I C.31      4 I C.15      2 I 0.15      2 I 1.54      20 M =    1.0C
  12 I     1.00    I    1C.00    I     1.00    I     4.00    I     2.00    I     2.CO    I     20.0C    S =    0.
     I C      0.08 I C      C.77 I 0      0.08 I 0      0.31 I 0      C.15 I 0      C.15 I 0      1.54 R =    0.
     I             I             I             I             I             I             I
     I-------------I-------------I-------------I-------------I-------------I-------------I
     I             I             I             I             I             I             I
     I 1.38     18 I 1.31     17 I 1.00     13 I 0.38      5 I C.23      3 I 0.61      8 I 4.92      64 M =    1.0C
  13 I    18.00    I    17.00    I    13.CO    I     5.CC    I     3.0C    I     8.CO    I     64.0C    S =    C.
     I C      1.38 I 0      1.31 I 0      1.00 I C      0.38 I G      0.23 I 0      C.61 I 0      4.92 R =    C.
     I             I             I             I             I             I             I
     I-------------I-------------I-------------I-------------I-------------I-------------I
     I             I             I             I             I             I             I
     I 0.23      3 I C.15      2 I 0.23      3 I C.23      3 I 0.        0 I C.        C I 0.84      11 M =    1.CC
  14 I     3.CO    I     2.00    I     3.00    I     3.00    I     0.      I     0.      I     11.0C    S =    C.
     I 0      0.23 I C      C.15 I 0      0.23 I 0      C.23 I 0      C.   I C      0.   I 0      C.84 R =    C.
     I             I             I             I             I             I             I
     I-------------I-------------I-------------I-------------I-------------I-------------I

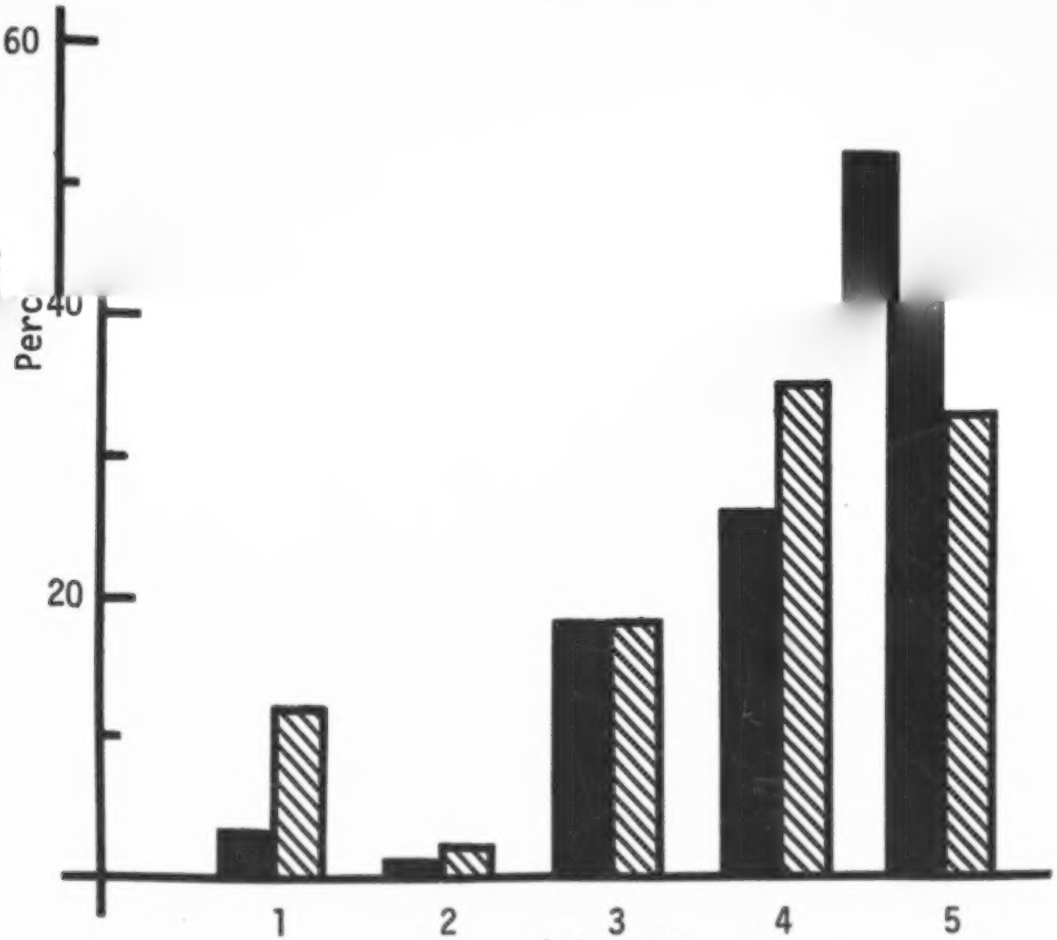
      12.52    163  34.95    455  23.20    302  12.67    165   5.15     67  11.52    15C     100.00   1302
          163.CO        455.CO        302.00        165.00         67.CC        150.00          1302.0C
      C      12.52  0      34.95  0      23.20  0      12.67  C       5.15  C      11.52     C   100.CC

   M =        1.CC M =     1.CC M =     1.CC M =     1.00 M =     1.0C M =     1.CO M =        1.CO
   S =        0.   S =     0.   S =     0.   S =     0.   S =     0.   S =     0.   S =        0.
   R =        0.   R =     0.   R =     0.   R =     0.   R =     C.   R =     C.   R =        C.
```

FIG. IV.2 PERCENT OF LEAS COMPARED TO PERCENT OF PROJECTS



(a) State



(b) SMSA

marily rural and from its LEAs in SMSAs #4 and #5 alone drew 32% of all New England projects.

Figure IV.2 compares the percentages of LEAs to the percentages of projects within the state and SMSA groups. For SMSAs, however, the distributions of LEAs and of projects are quite different. Core city LEAs (SMSA #1), for example, represent only 3% of all participant LEAs, yet they contribute nearly 13% of all projects and, in terms of project enrollments and budgets, account for even larger percentages of the New England totals. To a lesser extent, the same situation occurs in SMSA #4 where 26% of the New England LEAs operated 35% of the projects. In SMSA #5 the shift is in the opposite direction. Here, 52% of the region's participating LEAs sponsored only 33% of its projects. It is only in SMSAs #2 and #3 that the percentages of LEAs and of projects are within one percent (1%) of each other. The percentage of projects within each state, however, corresponds more closely to the percentage of LEAs. Only in Vermont (#6), does the pattern shift markedly. In this state 22% of the New England LEAs sponsored only 12% of the total number of projects.

IV.1.2 *Multiple and Cooperative Projects*

These variations among SMSA and state groups are a function of LEA and project administrative organization. If each LEA had been the sole operator of only one project, obviously the distributions of LEAs and projects would have been identical. This, however, was not the case. First, nearly one third (31%) of the LEAs chose to spend Title I funds on two or more projects rather than concentrating all Title I money on one project. Figure IV.3 and Table IV.4 illustrate the distribution of

LEAs according to the number of projects they sponsored and indicate the percentages of LEAs within state and SMSA groups that elected to operate various numbers of projects. These multiple-project LEAs are proportionally more frequent in highly urban SMSAs (SMSAs #1 or #2) where large allocations made it feasible for them to sponsor several sizable projects for different groups of children. Smaller school districts and those with lower Title I allocations tended to operate fewer projects, concentrating available funds upon only one or two different projects. Another alternative in project organization was for two or more LEAs to combine their individual Title I allocations and jointly sponsor one, or sometimes several, projects. The distribution of the ninety (90) New England projects (7%) that were set up in this cooperative manner is shown in Figure IV.4 and Table IV.5. The greatest number of the cooperative projects were in SMSA #4 (54 projects, 60% of cooperative projects); SMSA #5 followed with 31% and SMSA #3 with 9%. No cooperative projects were reported in SMSAs #1 or #2. It follows then that the three more rural states of Maine (#2), New Hampshire (#4), and Vermont (#5) operated 81% of all cooperative projects. In New Hampshire, a particularly large number of small LEAs co-sponsored projects. [illegible] fact that there were relatively more LEAs participating than there were projects explains the discrepancy noted in Figure IV.1 between that state's percentages of projects and LEAs.

By project type, the percentage distribution of these cooperative projects adhered closely to the distribution of all 1302 projects. In only two project types was there a difference of even 5% between the percentage of all projects of that type and the percentage of cooperative

FIG. IV.3 NUMBER OF LEAS OPERATING ONE OR MORE PROJECTS

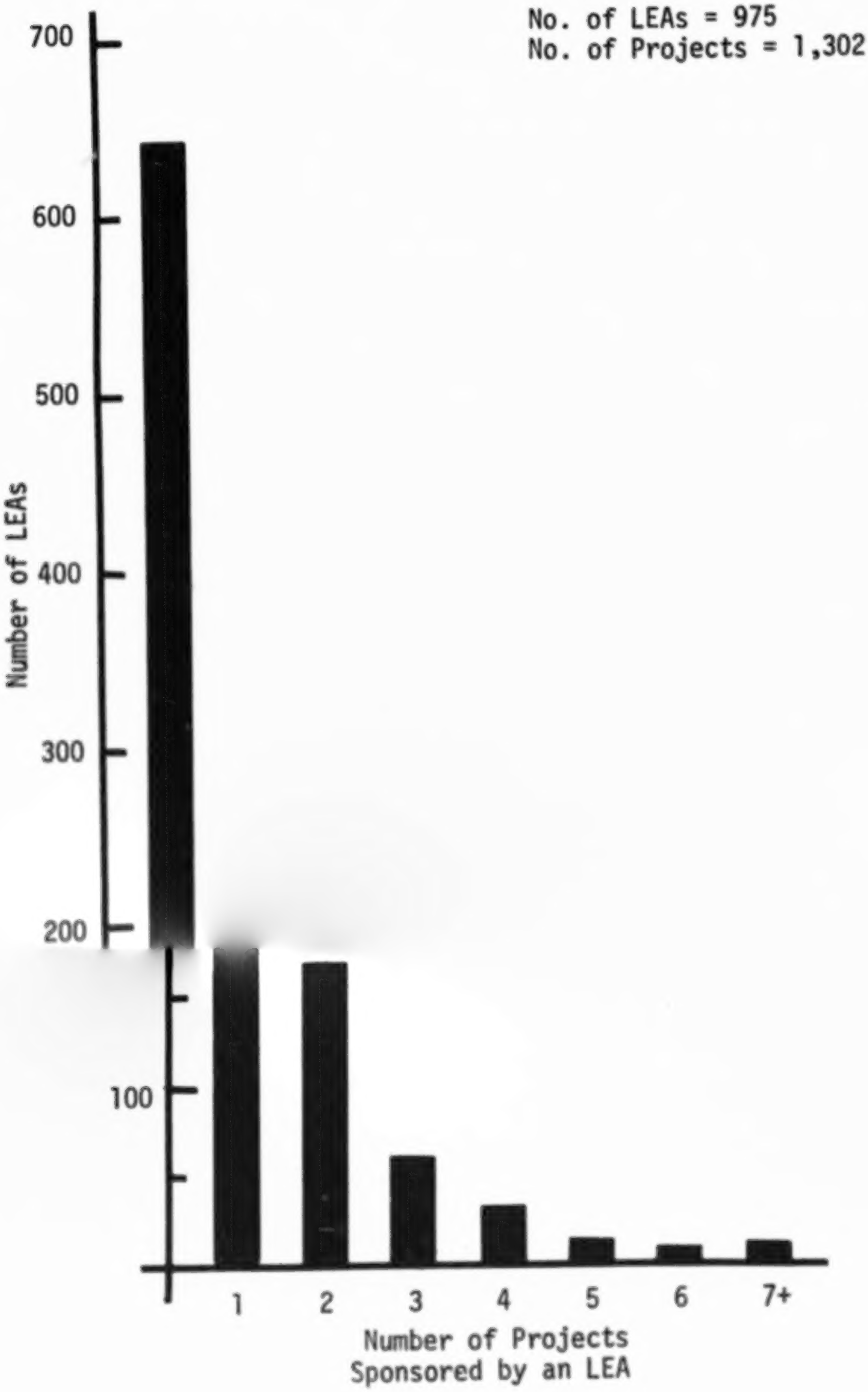

No. of LEAs = 975
No. of Projects = 1,302

TABLE IV.4 PERCENT OF LEAS WITHIN EACH STATE AND SMSA WITH X PROJECTS

STATE X =	1	2	3	4	5	6	7+	Total
Conn. (N = 117 LEAs)	79%	11	4	3	1	0	3	100%
Maine (N = 272)	62%	22	7	4	3	1	1	100%
Mass. (N = 186)	67%	19	5	3	1	1	3	100%
N. H. (N = 131)	73%	15	8	4	0	1	0	100%
R. I. (N = 34)	59%	15	9	9	6	0	3	100%
Vt. (N = 205)	69%	19	7	2	-	2	-	100%

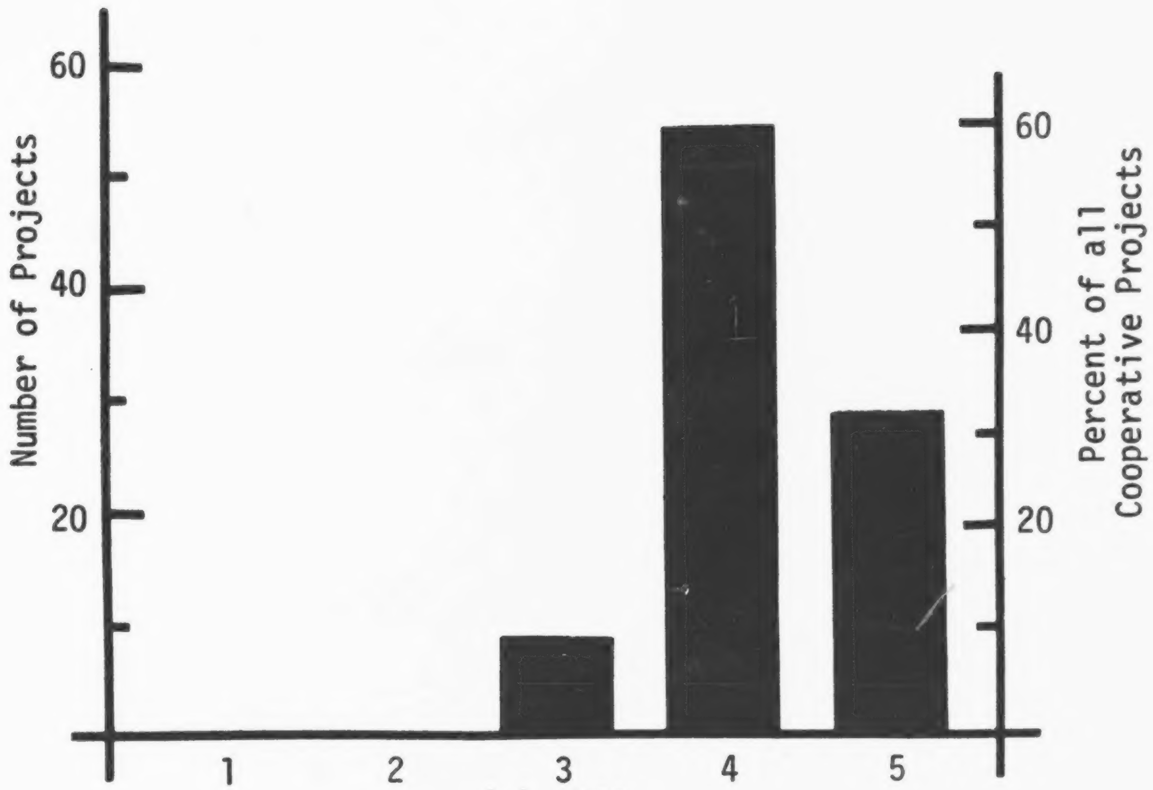
SMSA X =	1	2	3	4	5	6	7+	Total
1 (N = 31 LEAs)	19%	13	13	13	3	6	32	100%
2 (N = 11)	27%	27	27	18	0	0	0	100%
3 (N = 167)	74%	18	3	2	2	1	0	100%
4 (N = 247)	59%	17	12	7	2	2	1	100%
5 (N = 489)	74%	19	4	1	1	1	-	100%

TOTAL FOR NEW ENGLAND (N = 945 LEAs)	68%	18%	7%	3%	1%	1%	1%	100%

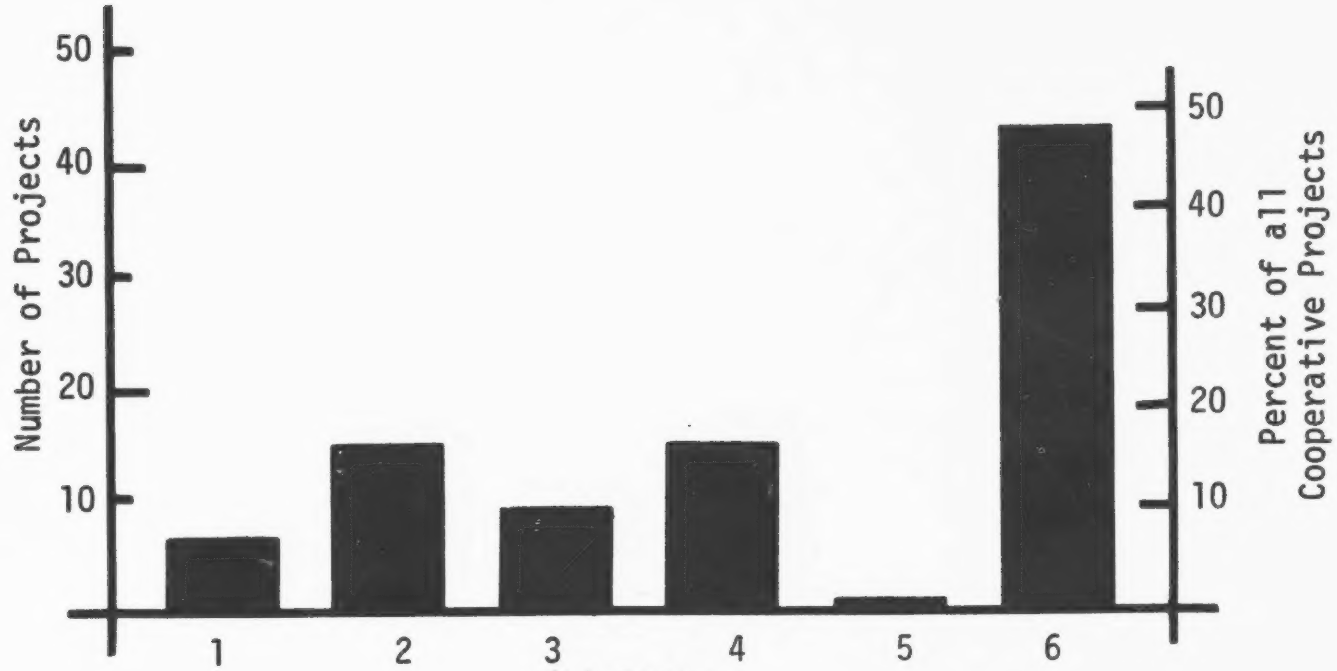
[-] = less than 0.5%

FIG. IV.4 PROJECTS SPONSORED BY TWO OR MORE LEAS

N = 90 Projects



(a) SMSA



(b) State

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CROSS-TABULATION FOR TITLE I APPLICATIONS DATA                          TABLE NO.IV.5

  THE TABULATED VARIABLE IS COOPERATIVE PROJECTS        UNITS ARE PROJECTS       GRAND COUNT     =          90
                                                                                GRAND MISSES    =        1212
  SMSA TYPE ACROSS BY STATE DOWN                                                GRAND TOTAL     =       90.00
                                                                                GRAND MEAN      =        1.00
                                                                                GRAND STD. DEV. =        0.
 *       1              2              3              4              5         GRAND RANGE     =        0.
  *
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 3.33         3 I 4.44         4 I 0.          0 I 7.78         7 M =        1.00
 1 I       0.      I       0.      I       3.00     I       4.00     I       0.      I       7.00  S =        0.
   I  42     0.    I   5     0.    I  55     3.33   I  42     4.44   I  12     0.    I  156   7.78 R =        0.
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 0.          0 I 8.89         8 I 7.78         7 I 16.67       15 M =        1.00
 2 I       0.      I       0.      I       0.      I       8.00     I       7.00     I       15.00  S =        0.
   I  20     0.    I   0     0.    I  22     0.    I 183     8.89   I 215     7.78   I  440  16.67 R =        0.
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 4.44         4 I 3.33         3 I 2.22         2 I 10.00        9 M =        1.00
 3 I       0.      I       0.      I       4.00     I       3.00     I       2.00     I        9.00  S =        0.
   I  76     0.    I  18     0.    I 114     4.44   I  61     3.33   I  24     2.22   I  293  10.00 R =        0.
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 0.          0 I 8.89         8 I 7.78         7 I 16.67       15 M =        1.00
 4 I       0.      I       0.      I       0.      I       8.00     I       7.00     I       15.00  S =        0.
   I   5     0.    I   0     0.    I   3     0.    I  64     8.89   I  78     7.78   I  150  16.67 R =        0.
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 1.11         1 I 0.          0 I 0.          0 I 1.11         1 M =        1.00
 5 I       0.      I       0.      I       1.00     I       0.      I       0.      I        1.00  S =        0.
   I  13     0.    I   3     0.    I  33     1.11   I  13     0.    I   4     0.    I   66   1.11 R =        0.
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 0.          0 I 34.44       31 I 13.33       12 I 47.78       43 M =        1.00
 6 I       0.      I       0.      I       0.      I       31.00    I       12.00    I       43.00  S =        0.
   I   0     0.    I   0     0.    I   0     0.    I  39    34.44   I  68    13.33   I  107  47.78 R =        0.
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I

     0.          0   0.          0   8.89         8   60.00       54   31.11       28     100.00      90
           0.              0.            8.00            54.00            28.00                  90.00
    156    0.        26    0.        227   8.89       402  60.00       401  31.11        1212   100.00

   M =         0.  M =         0.  M =        1.00 M =        1.00 M =        1.00      M =        1.00
   S =         0.  S =         0.  S =        0.   S =        0.   S =        0.        S =        0.
   R =         0.  R =         0.  R =        0.   R =        0.   R =        0.        R =        0.
```

projects. These two project types were "Instructional Services" (#4) which had no cooperative projects but 5% of all projects and project "Guidance and Counseling" (#10) which contributed nearly 9% of the cooperative projects and only 3.6% of all projects. Otherwise the two distributions are practically identical.

IV.2 TIME OF OPERATION AND DURATION

The scheduling of projects was examined from two points of view, first according to when projects were operated in relation to the school year, and secondly, according to how long they were in operation. The particularly late appropriation of FY66 Title I funds and the hurried initiation of administrative mechanisms for the *Elementary and Secondary Education Act* in the fall of 1965, probably made the scheduling patterns for the first year Title I projects rather atypical. Generally, the earliest starting data for the projects was in January, 1966, leaving only six instead of nearly ten months of the school year for project activities.

IV.2.1 Project Timing

Information on project timing in relation to the school year (that is, whether projects were operated during the school year only, during the summer, or during a combination of the two), was not available in the post-project evaluation reports. While some narrative discussions in the reports mentioned the time of operation, there was no systematic effort to collect this information. Therefore, the data had to be taken instead from the project applications. On the untested assumption that projects were likely to adhere to their original plans concerning time of operation, the proposed times were permanently assigned to evaluation data and fiscal data as well. The following four categories were used:

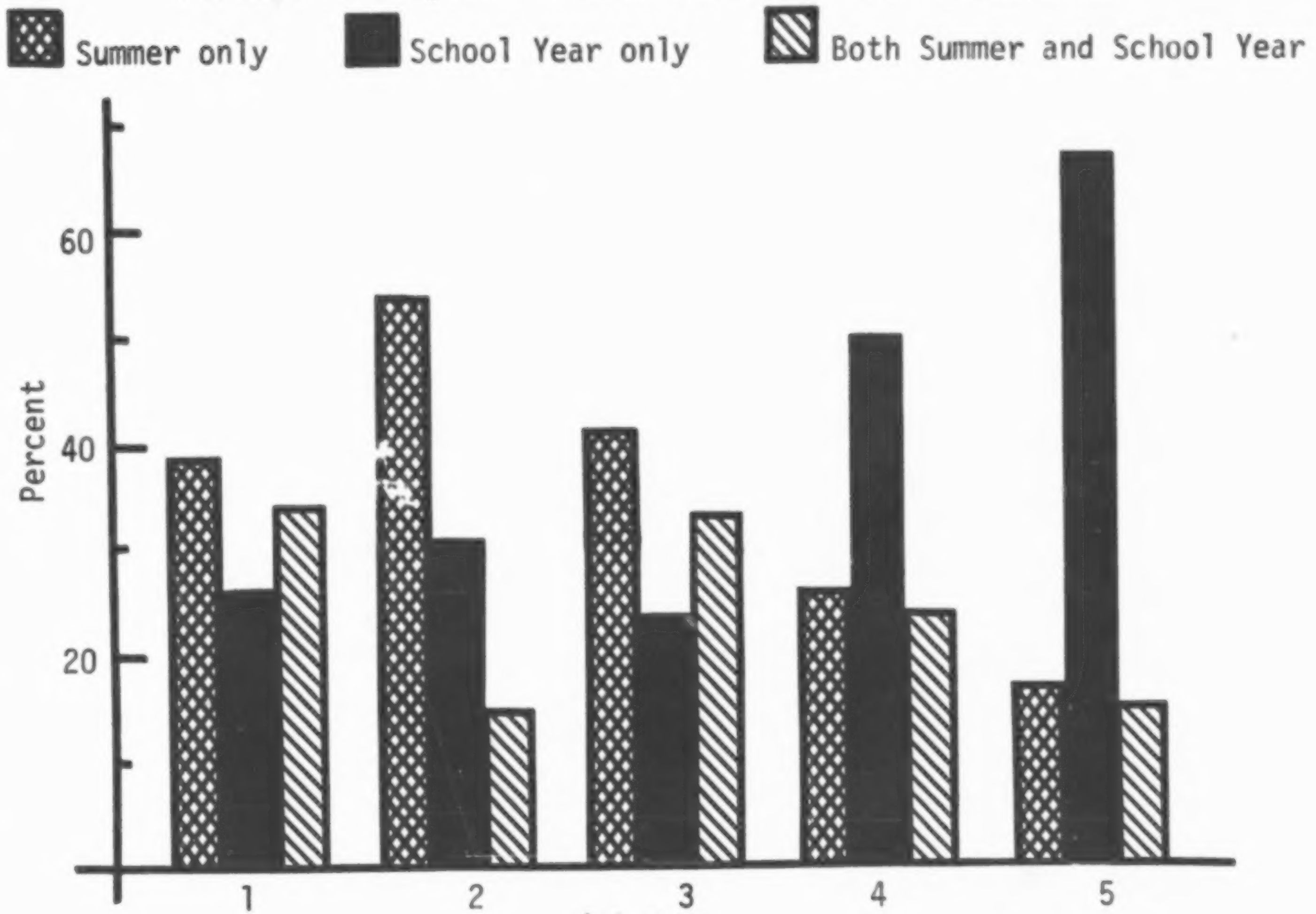
1. "School Year" projects were those whose proposed beginning and ending dates fell within the FY66 school year, that is between September, 1965 and June, 1966.
2. "Summer" projects were those proposing to begin no earlier than June, 1966 and to end no later than August, 1966.
3. "Both Summer and School Year" projects were those whose activities were planned to begin before June, 1966 and to end in either July or August of 1966.
4. "Unclassified" projects were those that did not provide sufficient data on proposed beginning and ending dates.

Figure IV.5 illustrates by SMSA and by state the percentage of classifiable projects according to their time of operation. The degree of urbanization appears to have affected strongly timing. LEAs in SMSAs 4 and 5 operated their projects primarily during the school year while those in SMSAs 1, 2, and 3 operated greater proportions of summer programs. It follows that Maine, New Hampshire, and Vermont appear more similar than the three more urban states. They operated greater percentages of their projects during the school year only and markedly lower percentages of summer projects.

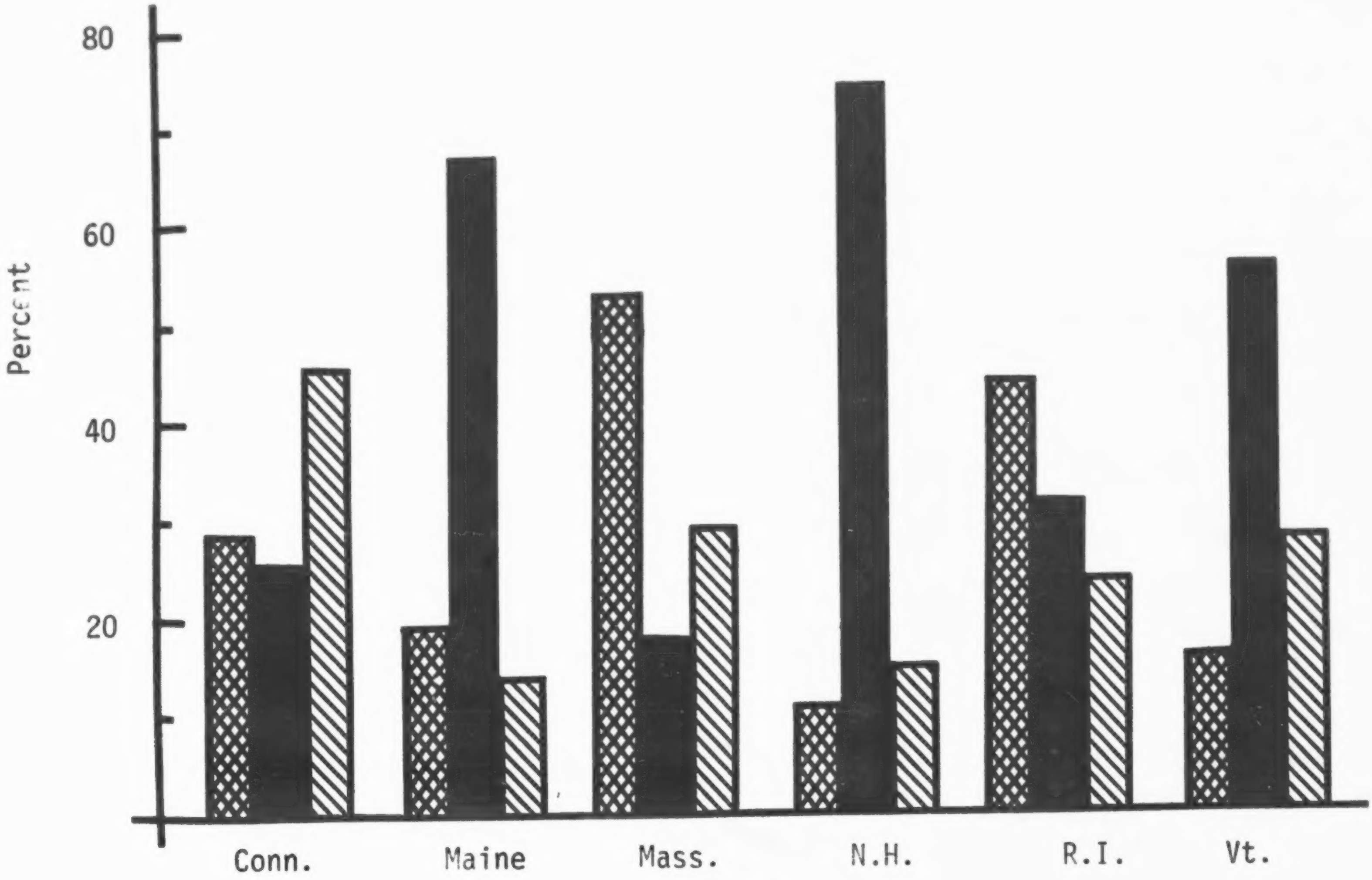
Figure IV.6 illustrates the project type distributions for "Summer," "School Year," and "Both" categories. There were several exceptions to the general pattern of a 1:2:1 ratio in the ways projects fell into these

FIG. IV.5 TIMING OF PROJECTS (Application Data)

Percent of Projects in Each State and SMSA Planned for



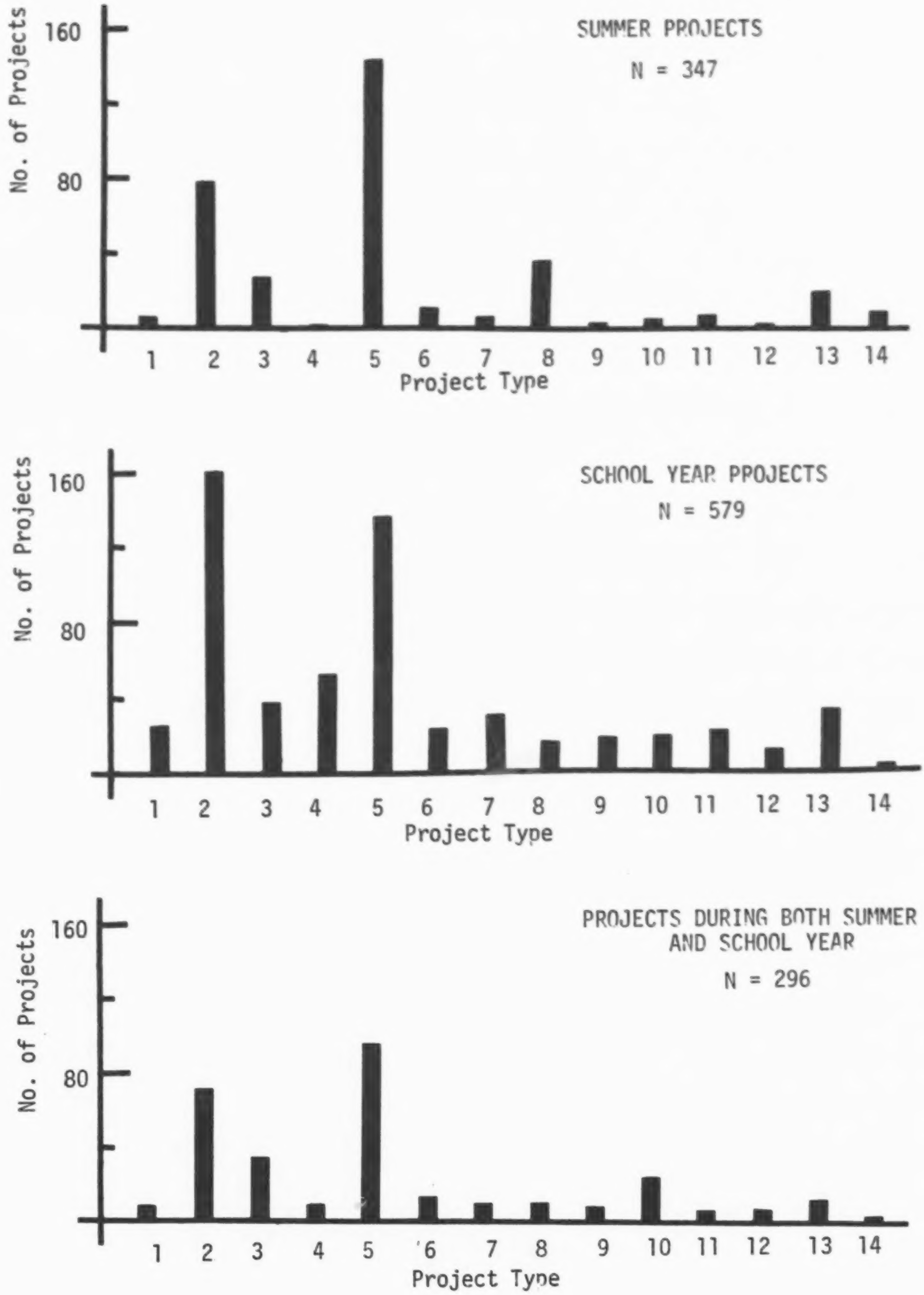
(a) SMSA



(b) State

FIG. IV.6 TIMING OF PROJECTS, BY PROJECT TYPE (Application Data)

N = 1,222



three categories. "Language Arts" (#3), and "General Remedial" (#5) projects were fairly evenly distributed. "School Readiness" (#8) and "In-Service Training" (#14) projects were most frequently conducted during the summer while summer activities in "Instructional Services" (#4), "Materials and Equipment" (#9), and "Library Services" (#12) projects were rare.

IV.2.2 Duration of Projects

From the evaluation reports, data on the length of project operation were available for 641 projects. Three of the state forms requested the number of weeks of project operation; in only one of these were the operational dates themselves requested. For three states, there was no direct request for duration information, so the data were available only in those narrative descriptions that happened to include the dates or length of operation as part of the discussion. All available information was converted to number of weeks of project operation. Weeks were divided into twelve groups to correspond roughly to monthly groups.

Figure IV.7 presents the spread of the 641 responding projects by week spans. The single span with the greatest number of projects was the 5-9 week group. This span includes a large portion of the summer projects as well as some short projects operated during the school year. The second largest span, 18-22 week division, is likely to include many projects that started in January or February of 1966 and ran through the school year. The late appropriation of FY66 funds raises some question about the accuracy of the data on the eight projects that reported lengths from 40 to 52 weeks. Since most of these projects were in one state, the Title I administrative policy of that state may have enabled longer projects.

Monthly spans were developed for the proposed duration data in application forms. These are presented in the Statistical Supplement. Because they are only rough spans and are not comparable to the groupings for the evaluation data and because they include twice as many projects as the evaluation data, there is little value in drawing comparisons between them and the actual project durations.

Table IV.6 presents the frequencies of projects by project type cross-tabulated with the duration spans. The number of projects responding within most of the project types is often too small to draw conclusions, but the pattern seems to be that project type does not particularly affect project timing.

IV.3 PROJECT ENROLLMENTS

The discussion of the numbers and characteristics of children enrolled in Title I projects is presented in two sections. Section *IV.3.1 Proposed Student Participants* examines the anticipated enrollments as reported in the project applications. Section *IV.3.2 Actual Student Enrollments* presents the post-operational data from the project evaluation reports and compares the proposed with the actual enrollment patterns. Section *IV.3.3* discusses adult participants. The project applications again provided much more explicit enrollment data than did the evaluation reports. In the applications, projects reported proposed student participants bro-

FIG. IV.7 DURATION OF PROJECTS (Evaluation Data)

N = 641

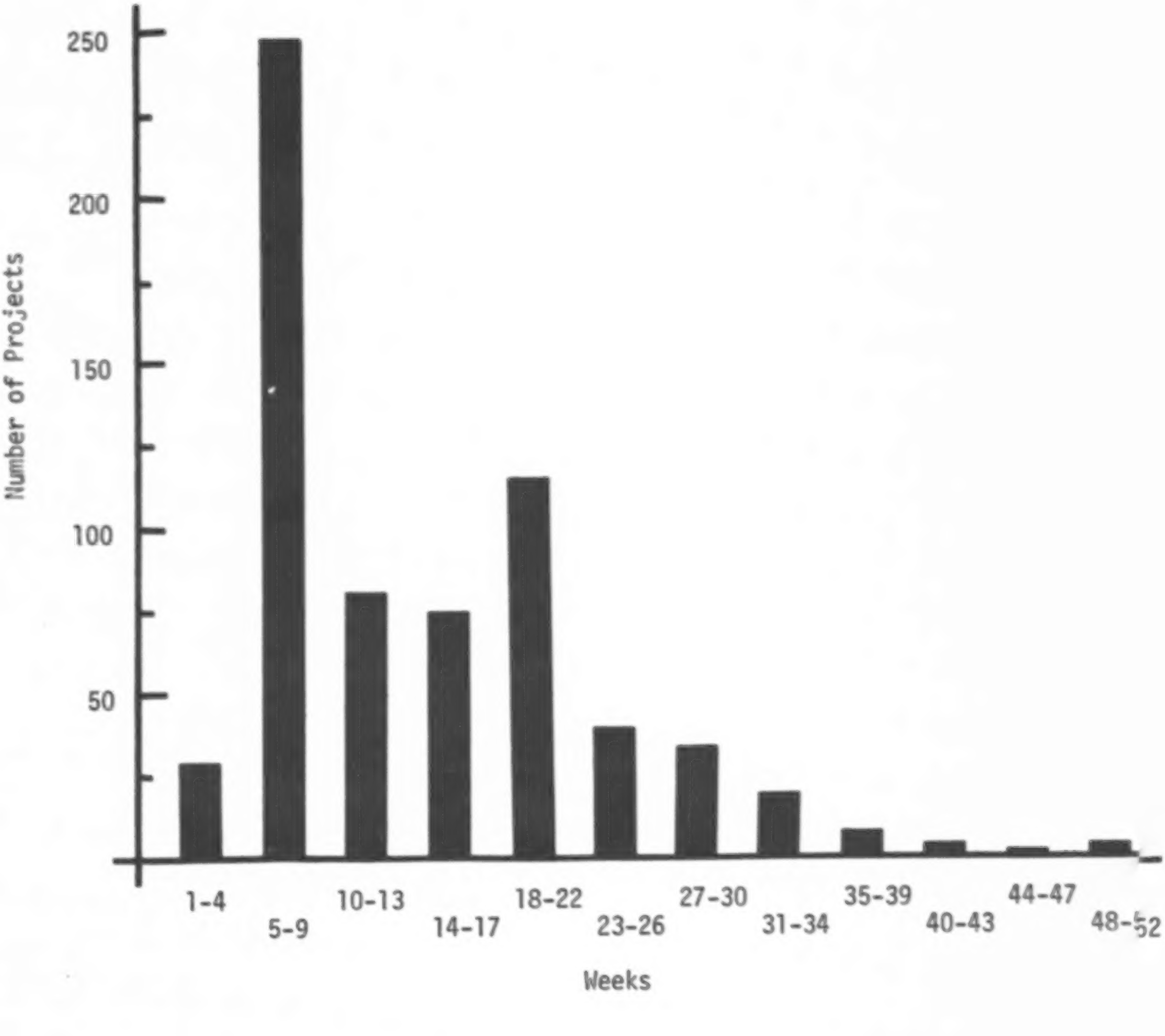


TABLE IV.6 DURATION OF PROJECTS (EVALUATION DATA)

WEEKS:	1-4	5-9	10-13	14-17	18-22	23-26	27-30	31-34	35-39	40-52	TOTAL
PROJECT TYPE											
1	4	7	6	2	4	1	0	1	1	0	26
2	6	67	17	19	32	13	12	4	4	2	176
3	3	17	10	8	11	0	2	0	0	1	52
4	1	6	7	9	7	5	2	3	1	0	41
5	8	94	19	27	31	12	12	4	2	3	212
6	2	7	5	2	4	3	1	1	0	1	26
7	2	5	1	1	8	1	0	0	0	0	18
8	1	13	1	0	1	0	2	1	0	0	19
9	0	3	5	1	1	0	0	2	0	0	12
10	0	6	3	1	2	1	0	0	0	1	14
11	0	3	3	0	4	0	0	0	0	0	10
12	0	3	2	1	1	2	1	0	0	0	10
13	0	15	1	3	8	1	1	1	0	0	30
14	1	2	0	0	0	0	0	0	0	0	3
TOTAL	28 (4%)	248 (38%)	80 (12%)	74 (11%)	114 (18%)	39 (6%)	33 (5%)	17 (3%)	8 (1%)	8 (1%)	649 (100%)

ken down according to grade level and school affiliation (public, private, not enrolled); these data were available for 1268 (97%) of the projects. Information on the children who finally did participate in Title I activities is much more sparce. While evaluation reports for 1120 (86%) of the projects provided enrollment figures, the data are much less detailed. The problem is largely a result of the structures of post-project report conforms which differed greatly among the six states and were not always comparable to the application data. While they all asked for separate information on public and private school children, one report required only total project enrollment. Two asked for the enrollments by grade span and one required only an unduplicated count of participants by span for the entire LEA. Only two asked for the same breakdowns found in the project applications. With enrollment data, as with most other kinds of information regarding Title I projects, the pre-operational plans are better documented than project results.

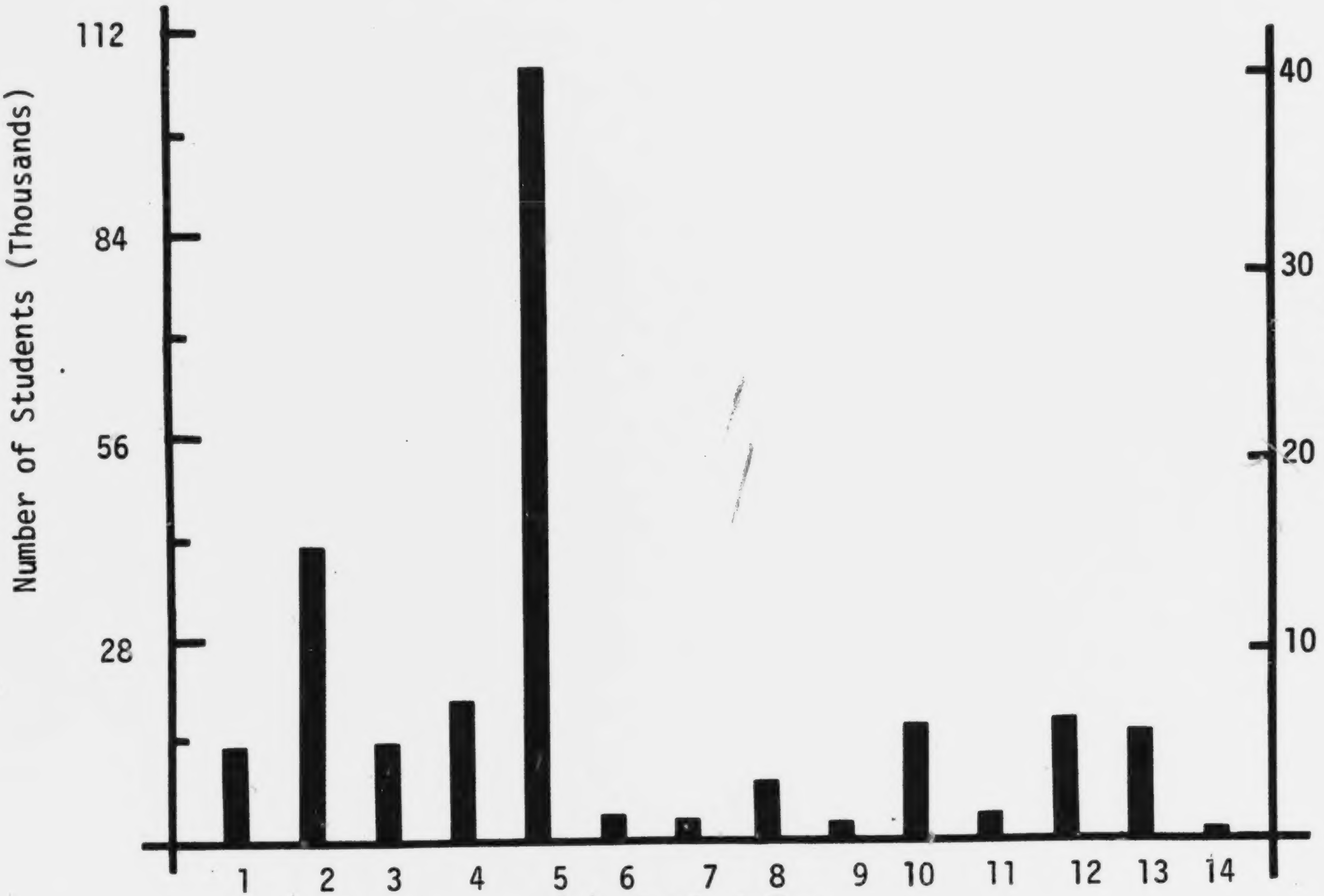
All enrollment data - proposed and actual - are limited in one respect. The figures were reported by project rather than by LEA and therefore duplicate the count of children enrolled in more than one project. It was not possible to isolate an unduplicated count of Title I participants for those few LEAs that operated two or more projects in the same schools at the same grade levels. While the likelihood of a child participating in two projects at once is small, to the extent that this situation occurred the enrollment totals are high.

IV.3.1 Proposed Student Participants

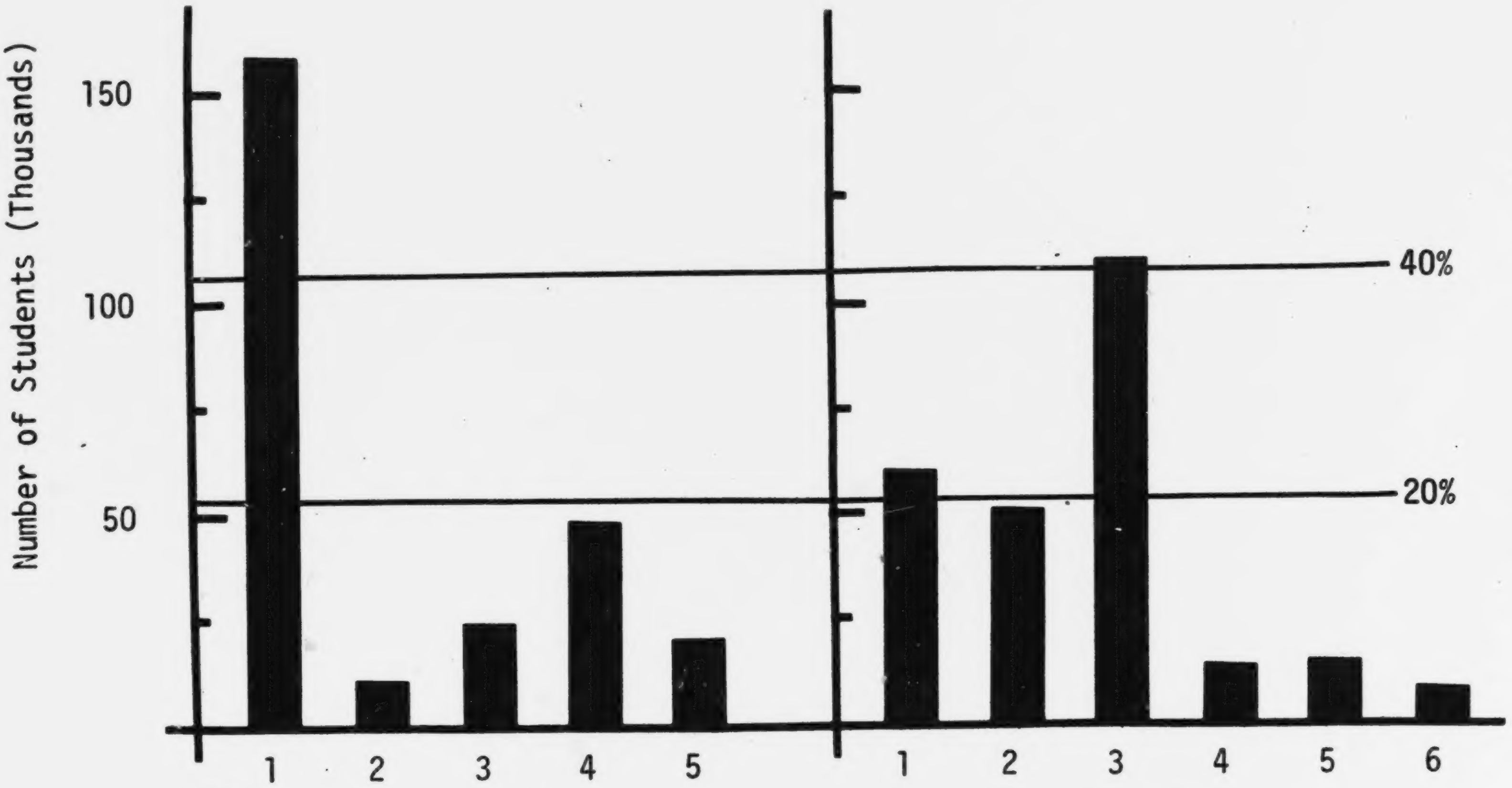
The FY66 Title I projects proposed in their applications to serve a total of 260,195 children. Figure IV.8 summarizes the distribution of the numbers and percentages of these children within major project type, SMSA, and state categories. Table IV.7 and IV.8 present the information in detail. Both the sizes of the grants (which were largely determined by community type) and the number of projects operated seem to be the two factors influencing the SMSA enrollment totals. The highest proposed enrollment for LEAs was in SMSA #1 where the 157,324 participants constituted 60% of all those proposed for New England. These LEAs were serving the largest base populations and had the largest Title I grants with which to operate. So, although they only sponsored 12% of the projects, it is not surprising to find that most of the children to be served by Title I were in these central city areas. SMSA #4 followed second in number of proposed participants reporting 47,468 or 18% of the total. Although their grant sizes and base populations were smaller than those of more metropolitan communities, simply because they operated a large number of projects (35% of the total) LEAs in SMSA #4 proposed to reach a large number of children. SMSAs #3 and #5 planned to serve about the same number of children, 10% and 8% respectively. LEAs in SMSA #3 operated fewer individual projects than those in SMSA #5, but their grants were large enough to enable them to include more children. LEAs in SMSA #5, on the other hand sponsored nearly as many projects as those in SMSA #4 (33%), but, because these rural school districts are small, no one project included many children. LEAs in SMSA #2 contributed only 4% of the student participants and sponsored only 2% of FY66 projects.

FIG. IV.8 TOTAL STUDENT PARTICIPANTS (Application Data)

N = 260,195



(a) Project Type



(b) SMSA

(c) State

3

Major Variable Codes

Code	Major Project Type
1	Academic Instruction
2	Reading
3	Language Arts
4	Instructional Services
5	General Remedial
6	Vocational
7	Special Classes
8	School Readiness
9	Materials and Equipment
10	Guidance and Psychological Services
11	Non-Academic Services to Pupils
12	Library
13	Non-Academic Enrichment Activities
14	In-Service Training

Code	State
1	Connecticut
2	Maine
3	Massachusetts
4	New Hampshire
5	Rhode Island
6	Vermont

Code	SMSA
1	Metropolitan - core city
2	Metropolitan - more than 50,000
3	Metropolitan - less than 50,000
4	Non-Metropolitan - more than 2,500
5	Non-Metropolitan - less than 2,500

```
CROSS-TABULATION FOR TITLE I APPLICATIONS DATA                         TABLE NO. IV.7

 THE TABULATED VARIABLE IS TOTAL CHILD PARTICIPANTS    UNITS ARE STUDENTS      GRAND COUNT      =          1268
                                                                               GRAND MISSES     =            34
 SMSA TYPE ACROSS BY STATE DOWN                                                GRAND TOTAL      =     260195.00
                                                                               GRAND MEAN       =        205.20
                                                                               GRAND STD. DEV.  =        824.22
*        1              2              3              4              5         GRAND RANGE      =      13730.00
 *
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  2.84     36 I  0.32      4 I  4.50     57 I  3.55     45 I  0.95     12 I 12.15     154 M =      352.23
1 I   48860.00   I     647.00   I    6324.00   I    3800.00   I     772.00   I   60403.00  S =     1182.80
  I   6  18.78   I   1   0.25   I   1   2.43   I   1   1.46   I   0   0.30   I   9   23.21 R =     8338.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  1.50     19 I  0.        0 I  1.74     22 I 14.75    187 I 17.03    216 I 35.02     444 M =      115.26
2 I   13121.00   I       0.     I    1996.00   I   23756.00   I   12303.00   I   51176.00  S =      301.71
  I   1   5.04   I   0    0.    I   0   0.77   I   4   9.13   I   6   4.73   I  11   19.67 R =     4344.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  5.60     71 I  1.42     18 I  9.31    118 I  5.05     64 I  2.05     26 I 23.42     297 M =      370.63
3 I   84577.00   I    8728.00   I   11516.00   I    4522.00   I     734.00   I  110077.00  S =     1373.08
  I   5  32.51   I   0   3.35   I   0   4.43   I   0   1.74   I   0   0.28   I   5   42.31 R =    13727.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.39      5 I  0.        0 I  0.24      3 I  5.36     68 I  6.62     84 I 12.62     160 M =       83.08
4 I    2606.00   I       0.     I     116.00   I    7516.00   I    3055.00   I   13293.00  S =      174.20
  I   0   1.00   I   0    0.    I   0   0.04   I   4   2.89   I   1   1.17   I   5    5.11 R =     2036.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  1.03     13 I  0.24      3 I  2.68     34 I  1.03     13 I  0.32      4 I  5.28      67 M =      230.88
5 I    8160.00   I     895.00   I    4851.00   I    1347.00   I     216.00   I   15469.00  S =      512.37
  I   0   3.14   I   0   0.34   I   0   1.86   I   0   0.52   I   0   0.08   I   0    5.95 R =     4082.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.        0 I  0.        0 I  0.        0 I  5.28     67 I  6.23     79 I 11.51     146 M =       66.97
6 I       0.     I       0.     I       0.     I    6527.00   I    3250.00   I    9777.00  S =       74.86
  I   0    0.    I   0    0.    I   0    0.    I   3   2.51   I   1   1.25   I   4    3.76 R =      474.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I

   11.36    144   1.97     25   18.45    234   35.02    444   33.20    421       100.00   1268
    157324.00       10270.00       24803.00       47468.00       20330.00            260195.00
    12  60.46     1    3.95      1    9.53     12   18.24     8    7.81            34  100.00

 M =     1092.53 M =     410.80 M =     106.00 M =     106.91 M =      48.29       M =     205.20
 S =     2219.93 S =     495.00 S =     110.67 S =     151.72 S =      52.35       S =     824.22
 R =    13711.00 R =    1915.00 R =     715.00 R =    1608.00 R =     391.00       R =   13730.00
```

```
CROSS-TABULATION FOR TITLE I APPLICATIONS DATA                             TABLE NO. IV.8

 THE TABULATED VARIABLE IS TOTAL CHILD PARTICIPANTS    UNITS ARE STUDENTS        GRAND COUNT      =         1268
                                                                                 GRAND MISSES     =           34
 SMSA TYPE ACROSS BY MAJOR PROJECT TYPE DOWN                                     GRAND TOTAL      =    260195.00
                                                                                 GRAND MEAN       =       205.20
                                                                                 GRAND STD. DEV.  =       824.22
*        1              2              3              4              5           GRAND RANGE      =     13730.00
 *
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 0.32       4 I 0.         0 I 0.63       8 I 1.18      15 I 1.58      20 I 3.71      47 M =     265.45
1 I   8754.00    I       0.     I     743.00   I    2235.00   I     744.00   I   12476.00   S =    1142.09
  I   1     3.36 I   0      0.  I   0     0.29 I   0     0.86 I   0     0.29 I   1     4.79 R =    7882.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 1.74      22 I 0.32       4 I 4.65      59 I 9.62     122 I 9.31     118 I25.63     325 M =     125.00
2 I  13733.00    I    1952.00   I    8127.00   I   11234.00   I    5579.00   I   40625.00   S =     232.38
  I   1     5.28 I   0     0.75 I   0     3.12 I   4     4.32 I   3     2.14 I   8    15.61 R =    2037.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 0.79      10 I 0.08       1 I 1.81      23 I 3.00      38 I 2.37      30 I 8.04     102 M =     133.14
3 I   5159.00    I     348.00   I    2135.00   I    4306.00   I    1632.00   I   13580.00   S =     244.33
  I   0     1.98 I   0     0.13 I   0     0.82 I   1     1.65 I   0     0.63 I   1     5.22 R =    2166.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 0.32       4 I 0.08       1 I 0.32       4 I 1.26      16 I 3.08      39 I 5.05      64 M =     288.27
4 I  13645.00    I      58.00   I     276.00   I    2105.00   I    2365.00   I   18449.00   S =     990.95
  I   1     5.24 I   0     0.02 I   0     0.11 I   0     0.81 I   1     0.91 I   2     7.09 R =    6692.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 4.10      52 I 0.71       9 I 6.86      87 I10.09     128 I 9.23     117 I30.99     393 M =     274.50
5 I  73187.00    I    4385.00   I    9386.00   I   15563.00   I    5358.00   I  107879.00   S =    1172.94
  I   1    28.13 I   0     1.69 I   0     3.61 I   3     5.98 I   1     2.06 I   5    41.46 R =   13726.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 0.47       6 I 0.16       2 I 0.39       5 I 2.21      28 I 0.71       9 I 3.94      50 M =      62.08
6 I    709.00    I      45.00   I      85.00   I    1858.00   I     407.00   I    3104.00   S =      57.29
  I   0     0.27 I   0     0.02 I   0     0.03 I   0     0.71 I   0     0.16 I   0     1.19 R =     222.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 0.47       6 I 0.08       1 I 0.47       6 I 1.74      22 I 0.63       8 I 3.39      43 M =      71.49
7 I   1839.00    I      30.00   I     351.00   I     659.00   I     195.00   I    3074.00   S =     126.40
  I   0     0.71 I   0     0.01 I   0     0.13 I   0     0.25 I   1     0.07 I   1     1.18 R =     623.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 0.79      10 I 0.16       2 I 1.58      20 I 1.03      13 I 1.18      15 I 4.73      60 M =     130.02
8 I   4694.00    I     580.00   I    1303.00   I     834.00   I     390.00   I    7801.00   S =     234.87
  I   0     1.80 I   0     0.22 I   0     0.50 I   0     0.32 I   0     0.15 I   0     3.00 R =    1495.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
```

CROSS-TABULATION FOR TITLE I APPLICATIONS DATA   TABLE NO. IV.8 (continued)

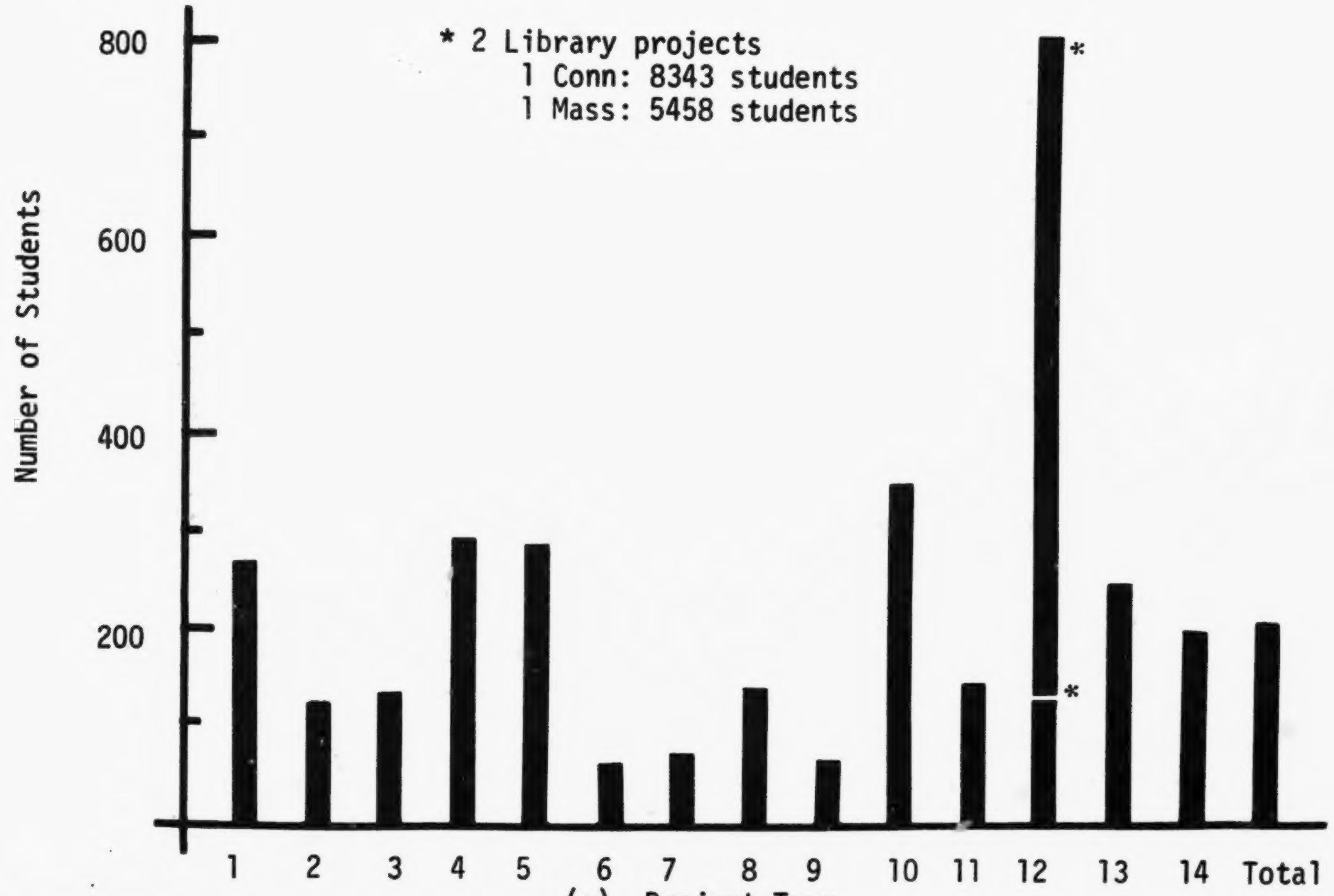
```
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  0.08      1 I  0.08      1 I  0.16      2 I  0.39      5 I  1.34     17 I  2.05      26 M =       61.69
 9 I    125.00    I      33.00   I     419.00   I     259.00   I     768.00   I    1604.00  S =       59.58
   I   1   0.05   I   0    0.01  I   0    0.16  I   0    0.10  I   1    0.30  I   2    0.62 R =      221.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  0.63      8 I  0.08      1 I  0.71      9 I  1.66     21 I  0.63      8 I  3.71      47 M =      346.02
10 I   11062.00   I     1935.00  I     794.00   I    2013.00   I     459.00   I   16263.00  S =      761.92
   I  0    4.25   I   0    0.74  I   0    0.31  I   0    0.77  I   0    0.18  I   0    6.25 R =     4341.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  0.32      4 I  0.         0 I  0.08      1 I  0.87     11 I  0.87     11 I  2.13      27 M =      141.33
11 I    1460.00   I        0.    I     215.00   I    1531.00   I     610.00   I    3816.00  S =      159.88
   I   1   0.56   I   0    0.    I   0    0.08  I   2    0.59  I   0    0.23  I   3    1.47 R =      746.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  0.16      2 I  0.08      1 I  0.16      2 I  0.63      8 I  0.55      7 I  1.58      20 M =      802.95
12 I   13801.00   I      312.00  I     202.00   I    1431.00   I     313.00   I   16059.00  S =     2085.33
   I  0    5.30   I   0    0.12  I   0    0.08  I   0    0.55  I   0    0.12  I   0    6.17 R =     8320.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  1.10     14 I  0.16      2 I  0.63      8 I  1.26     16 I  1.58     20 I  4.73      60 M =      244.80
13 I    8546.00   I      592.00  I     767.00   I    3309.00   I    1474.00   I   14688.00  S =      789.67
   I   3   3.28   I   0    0.23  I   0    0.29  I   1    1.27  I   0    0.57  I   4    5.64 R =     6032.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  0.08      1 I  0.         0 I  0.         0 I  0.08      1 I  0.16      2 I  0.32       4 M =      194.25
14 I     610.00   I        0.    I       0.     I     131.00   I      36.00   I     777.00  S =      244.63
   I   3   0.23   I   1    0.    I   1    0.    I   1    0.05  I   1    0.01  I   7    0.30 R =      606.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I

     11.36    144    1.97     25   18.45    234   35.02    444   33.20    421        100.00   1268
     157324.00       10270.00        24803.00        47468.00       20330.00            260195.00
     12   60.46      1    3.95       1    9.53      12   18.24      8    7.81            34  100.00

   M =    1092.53 M =     410.80 M =     106.00 M =     106.91 M =      48.29      M =     205.20
   S =    2219.93 S =     495.00 S =     110.67 S =     151.72 S =      52.35      S =     824.22
   R =   13711.00 R =    1915.00 R =     715.00 R =    1608.00 R =     391.00      R =   13730.00
```

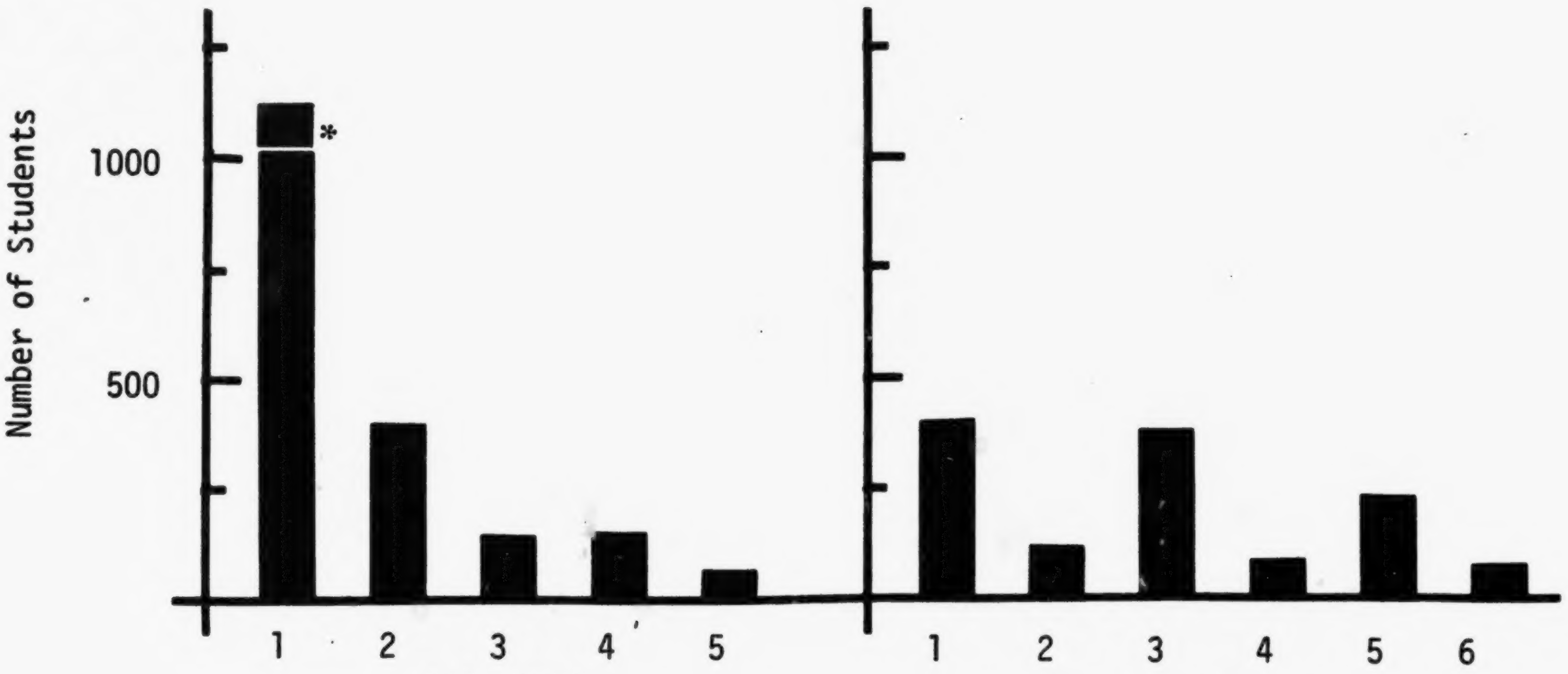
FIG. IV. 9 AVERAGE PROJECT ENROLLMENT

No. Students = 260,512
No. Projects = 1,268



* 2 Library projects
1 Conn: 8343 students
1 Mass: 5458 students

(a) Project Type

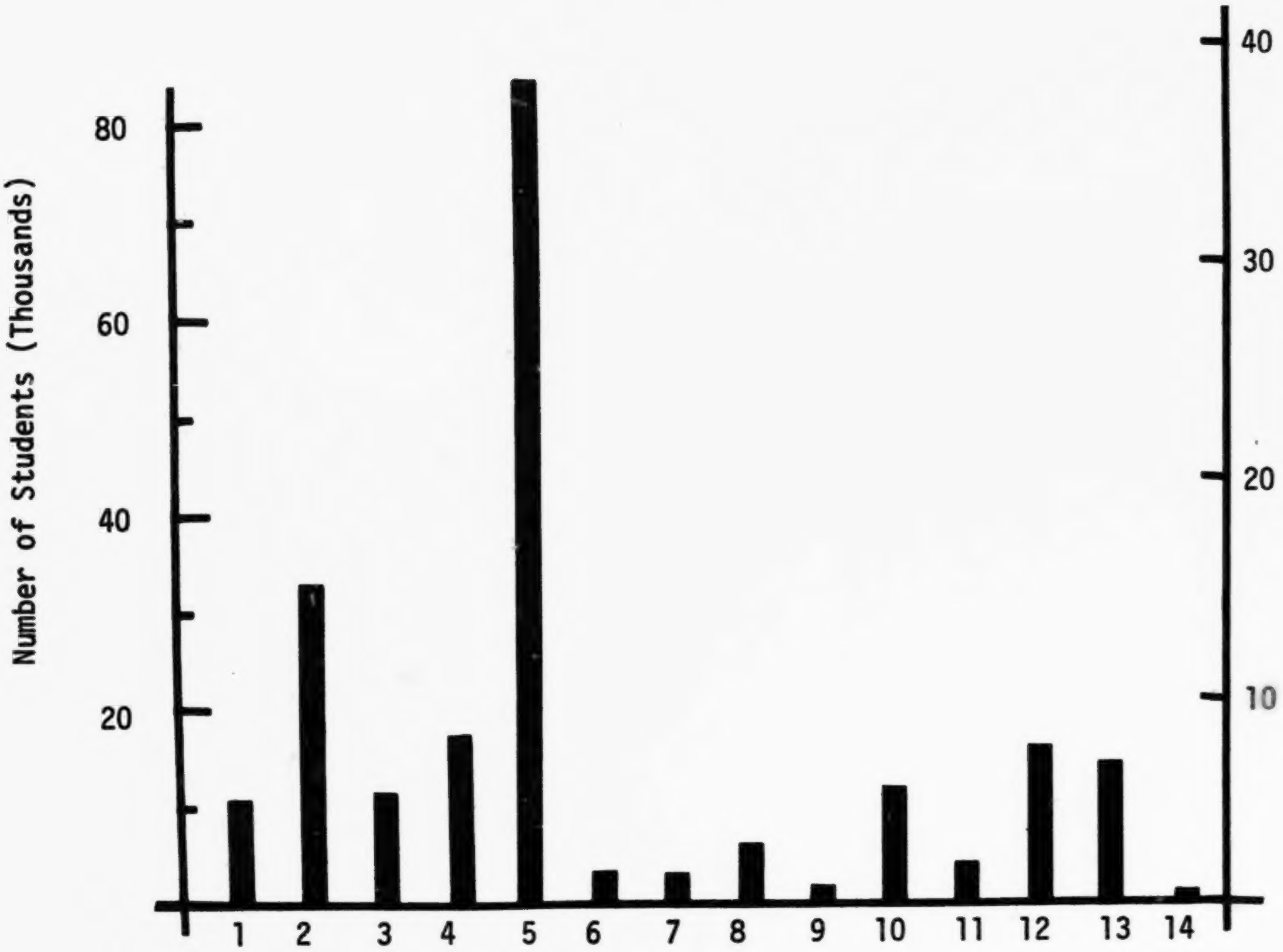


(b) SMSA

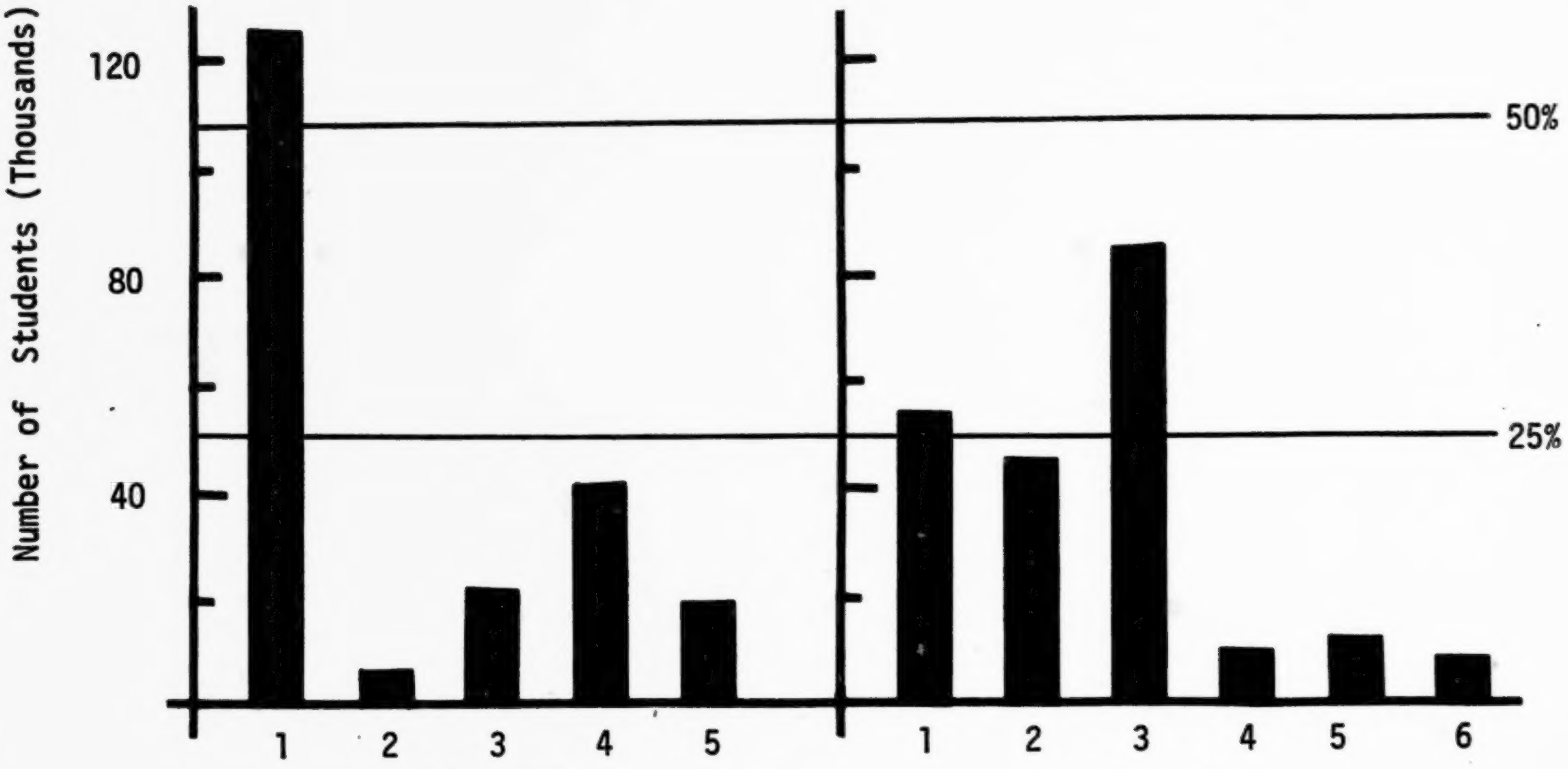
(c) State

FIG. IV.10 PUBLIC SCHOOL STUDENT PARTICIPANTS (Application Data)

N = 215,152



(a) Project Type

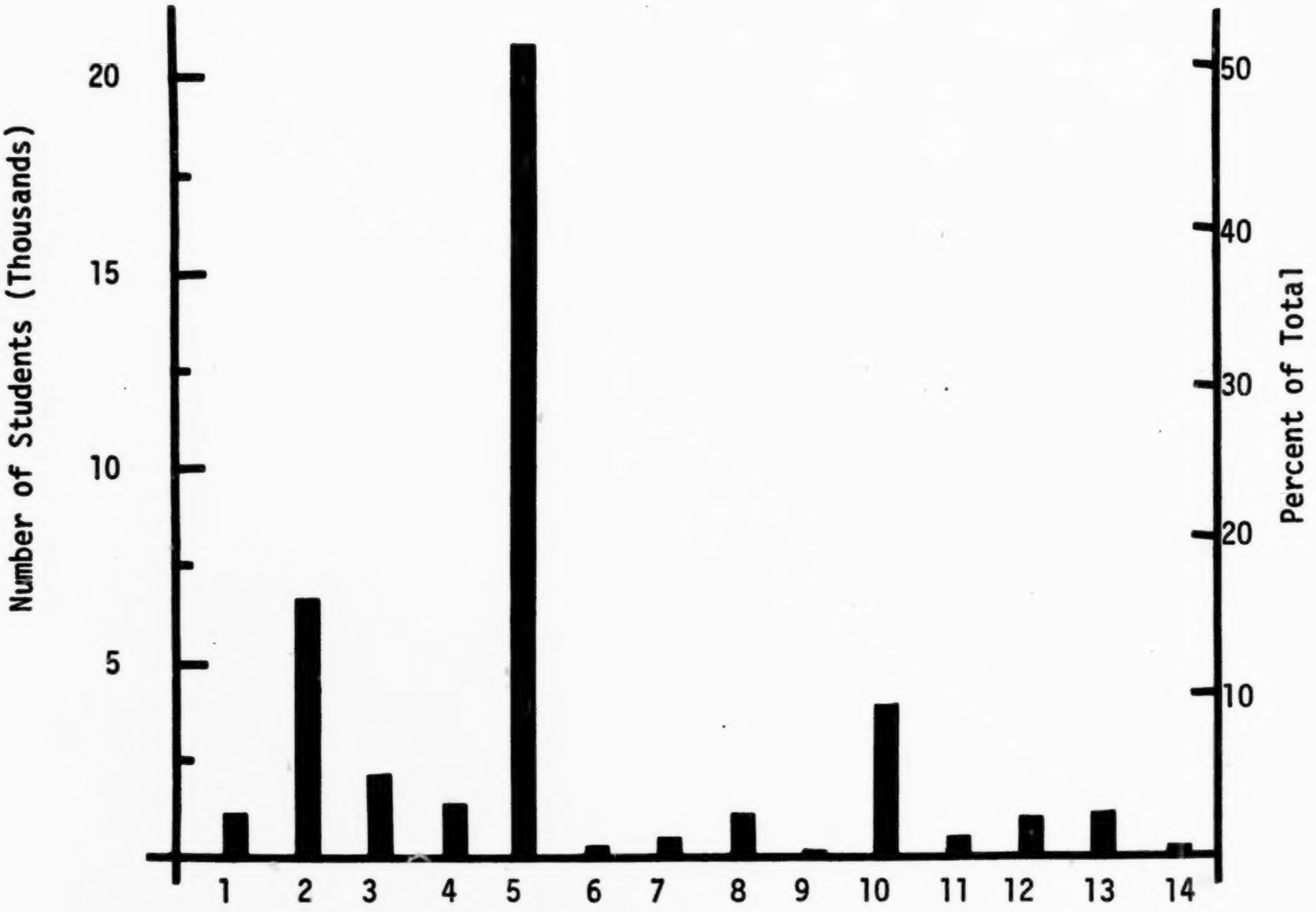


(b) SMSA

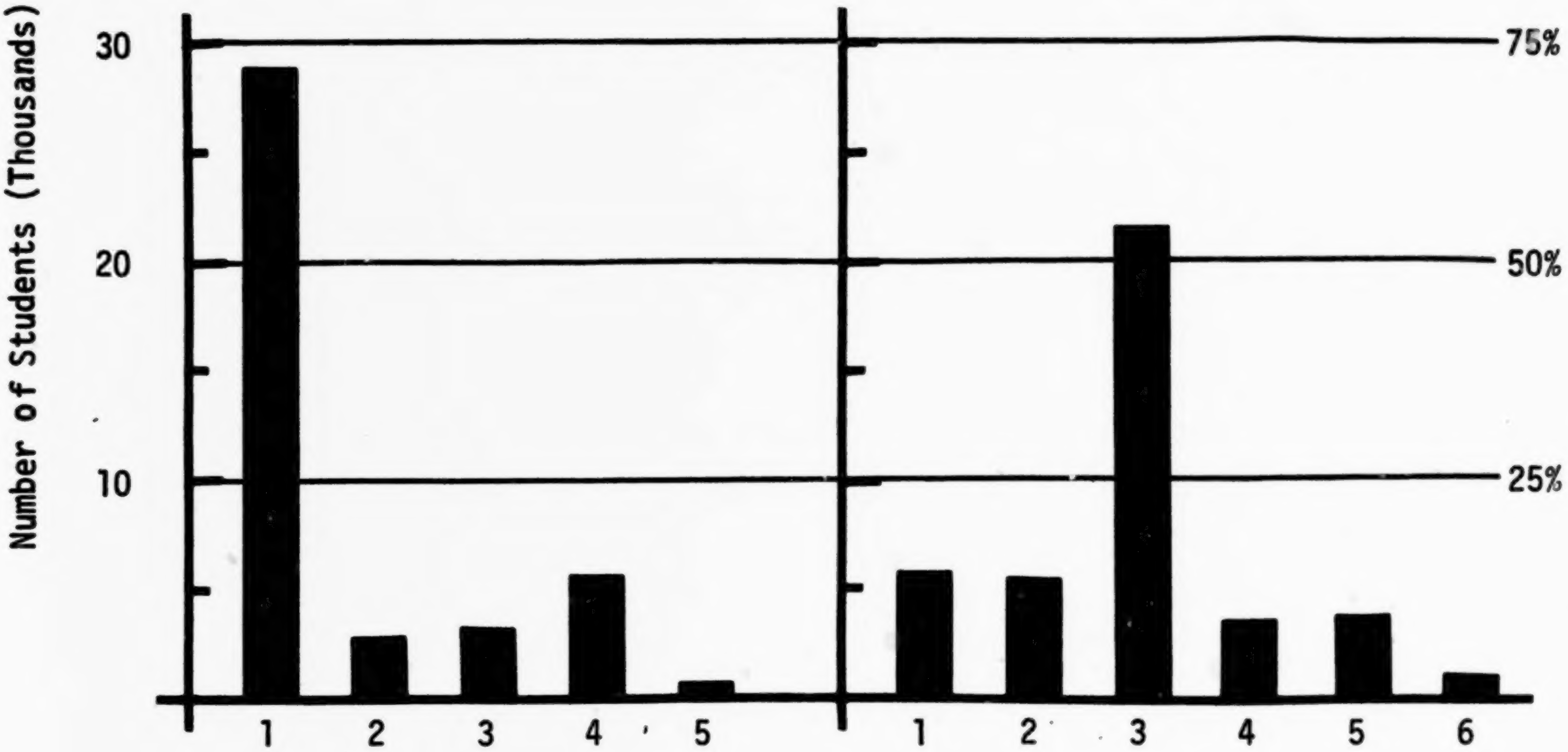
(c) State

FIG. IV.11 PRIVATE SCHOOL STUDENT PARTICIPANTS (Application Data)

N = 40,166



(a) Project Type

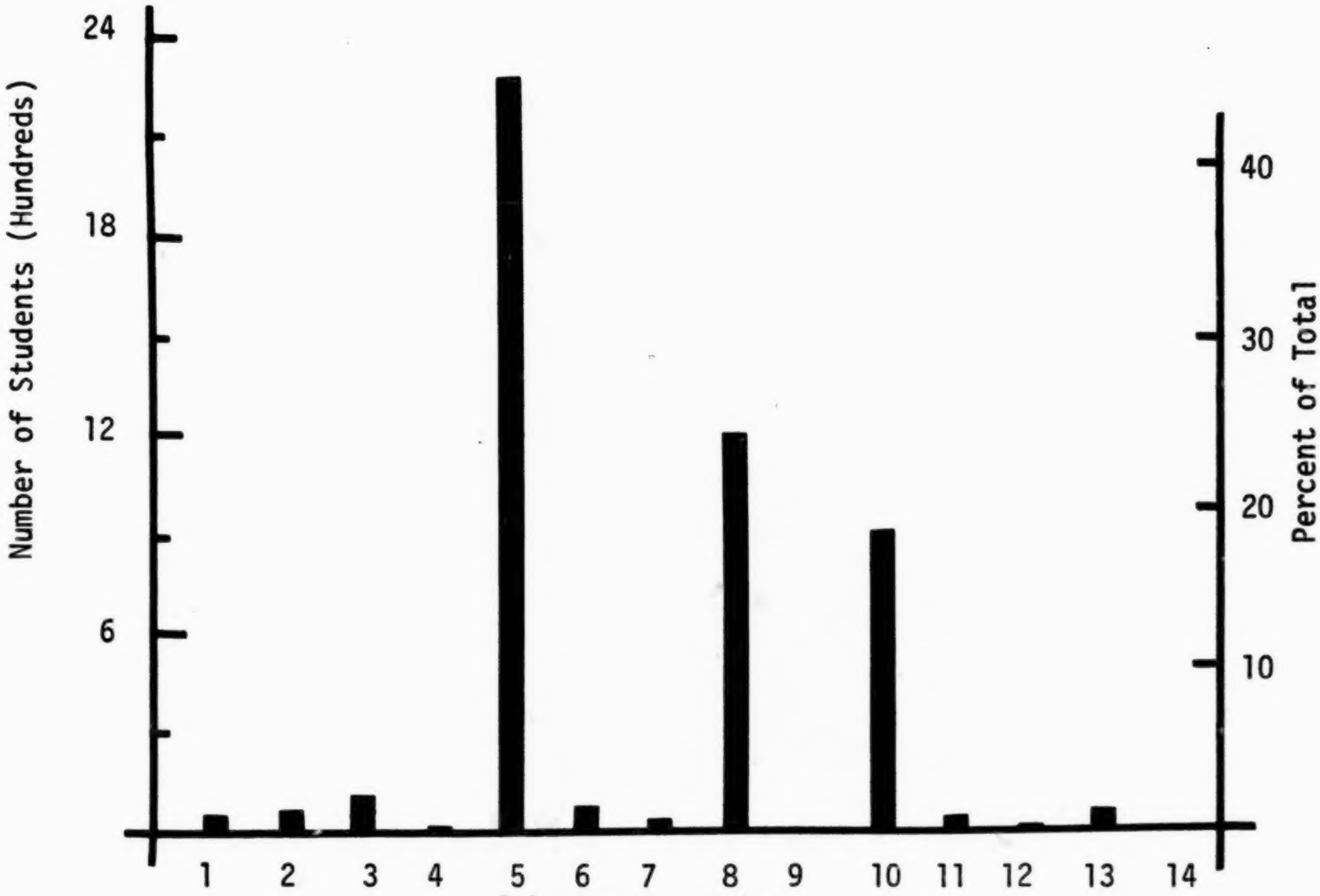


(b) SMSA

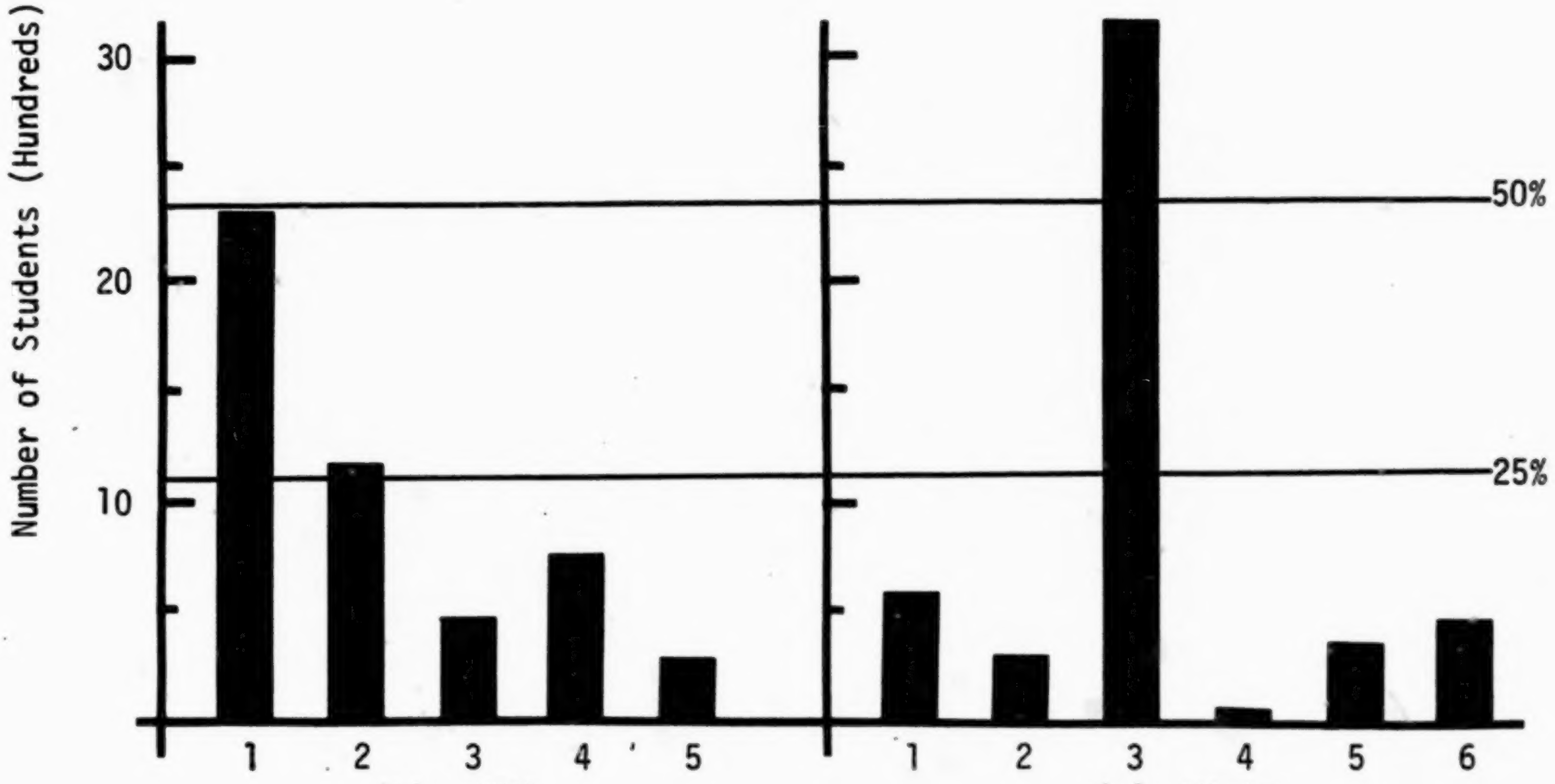
(c) State

FIG. IV.12 STUDENT PARTICIPANTS NOT ENROLLED IN ANY SCHOOL (Application Data)

N = 4,877



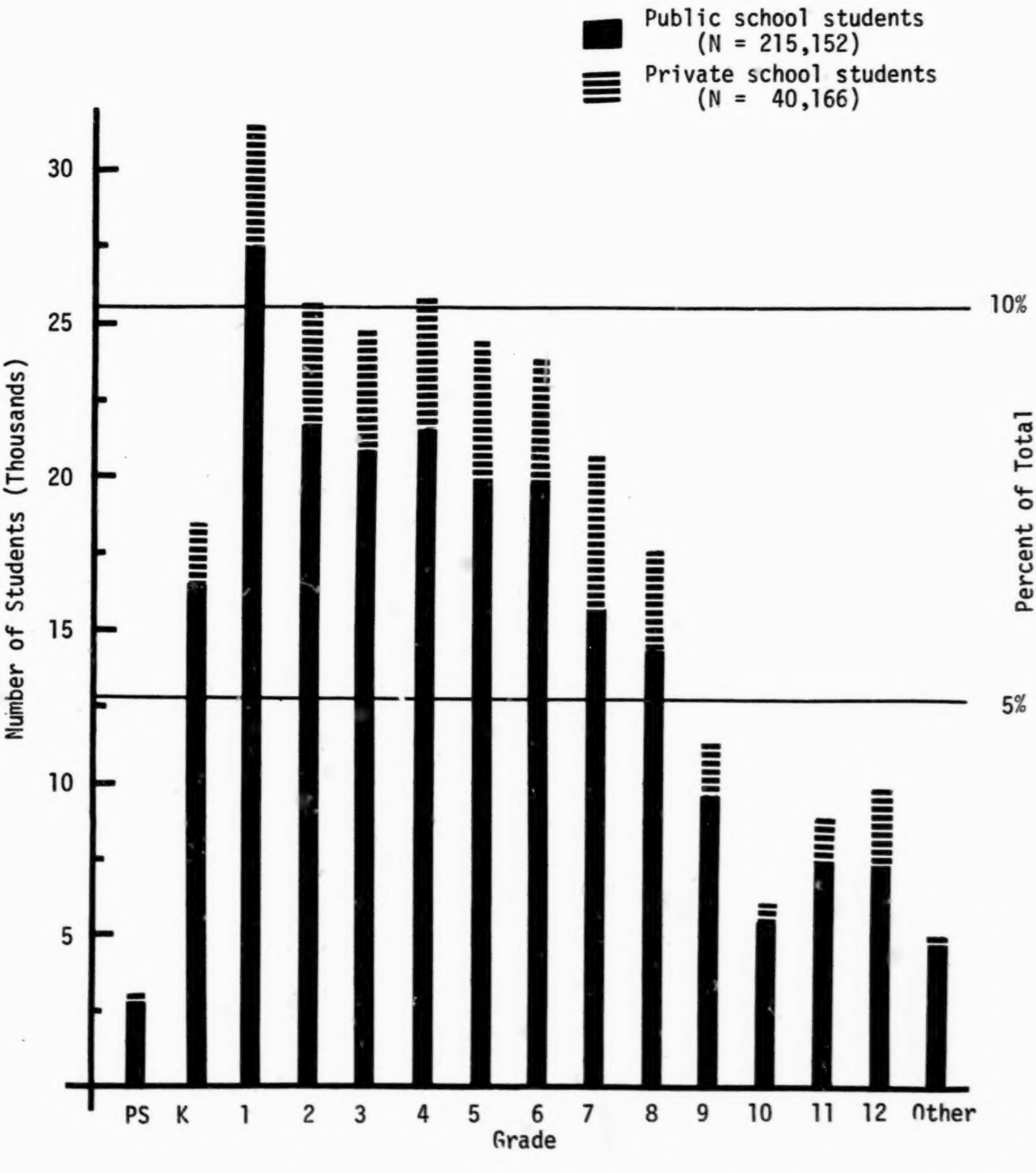
(a) Project Type



(b) SMSA

(c) State

FIG. IV.13 PUBLIC AND PRIVATE SCHOOL STUDENT PARTICIPANTS, BY GRADE (Application Data)



The anticipated enrollment totals for the states are strongly influenced by SMSA. Connecticut and Massachusetts are high primarily because of their LEAs in SMSA #1. Nineteen percent (19%) of all proposed participants were in Connecticut LEAs in SMSA #1; thirty-three percent (33%) were in Massachusetts SMSA #1 LEAs. The state of Maine is high because of its many projects in SMSA #4. These alone contributed 9% to the total proposed enrollment. As Table IV.7 indicates, none of the state by SMSA cells for New Hampshire, Rhode Island, or Vermont provided more than 5% of the student participants.

The total enrollments for the project types correspond generally to the project type distribution itself. Here the average project enrollments are of more interest than the totals. For a given project type, its SMSA distribution usually follows the overall SMSA distribution for all 1302 projects. Thus, total enrollments proposed within project types are almost consistently highest for the projects in SMSA #1 and lowest for those in SMSA #2.

Figure IV.9 illustrates the average project enrollments as they were proposed, isolating the two unrealistically large "Library Services" projects that greatly inflated the mean for that project type. Figures IV.10, IV.11, and IV.12 present the distributions of students according to school affiliation. The majority of private school participants were included in "General Remedial" (#5) projects. They were served primarily by LEAs in SMSA #1. Over 50% were in Massachusetts alone. The numbers of children not enrolled in any school followed a similar pattern but were also relatively high in "School Readiness" (#8) and "Vocational" (#10) projects. The distribution of proposed public and private school student participants is presented in Figure IV.13. Title I projects were most frequently planned for the elementary grades. There is a drop in numbers at grades seven and nine and again at grade ten. Grades 7-12 accounted for only 29% of the proposed enrollments while the primary grades (1-6) contributed 61%. Private and public school children were distributed relatively similarly by grade.

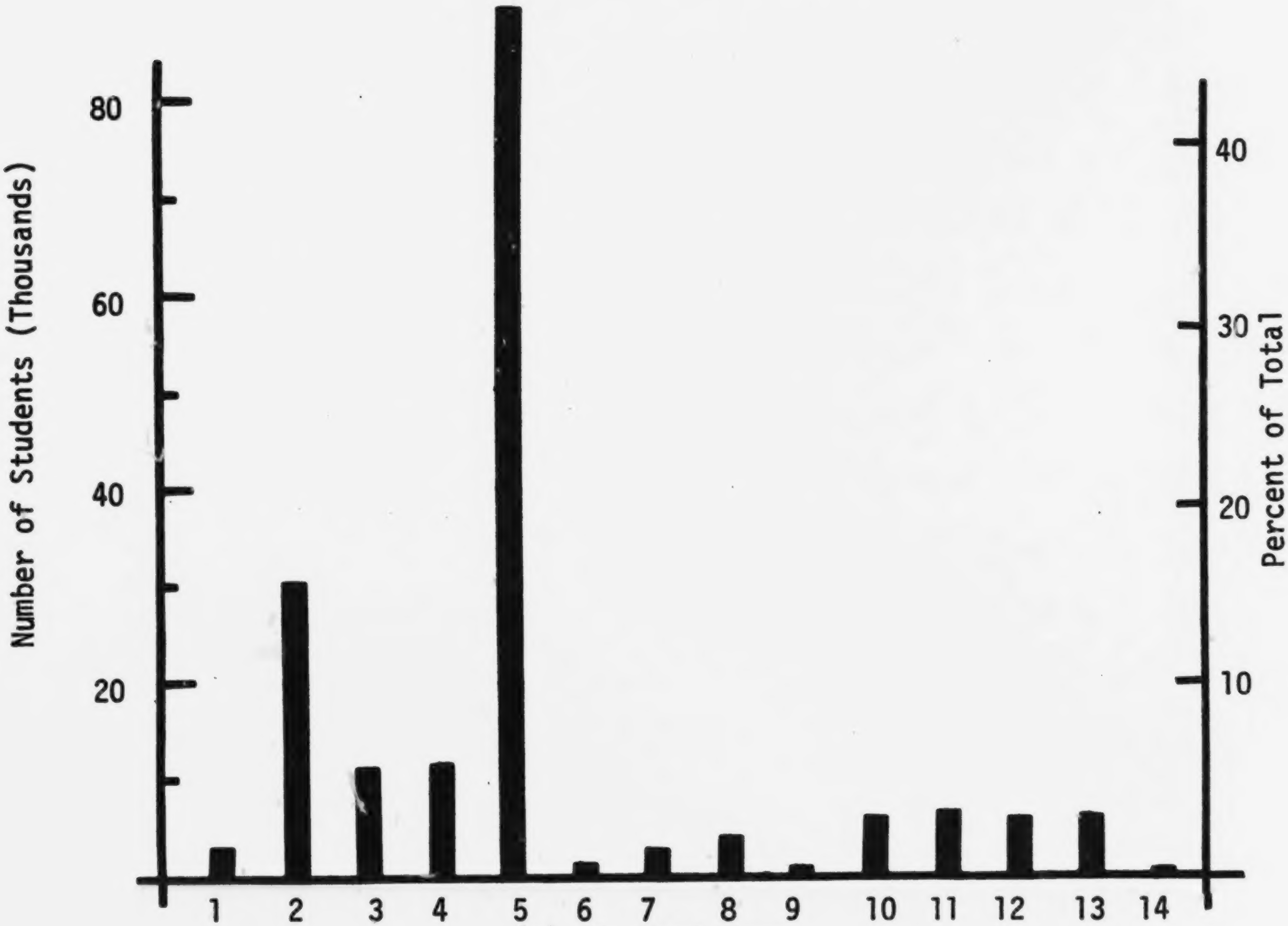
IV.3.2 Actual Student Enrollments

The total number of students reported as actually having been enrolled in Title I projects is summarized in Figure IV.14. Tables IV.9 and IV.10 present the detailed cross-tabulations first by SMSA and state, then by SMSA and project type. In terms of totals, the proposed and the actual number of student participants cannot be compared because of the different number of projects responding. The comparisons in Figure IV.15, however, illustrate the relationships between average project enrollments, proposed and actual. Enrollments generally dropped 19% from the proposed. They fell most pronouncedly in project types #1 ("Academic Instruction"), #10 ("Guidance"), and types #13 and #14 ("Non-Academic Enrichment" and "In-Service Training"). Only in one field, "Non-Academic Services" (#11) which principally involved various health and physical education activities did enrollments actually increase by 69%. By SMSA and state, with some variations, the proposed and actual mean enrollments followed similar patterns. The greatest shifts in enrollment were in central-city LEAs and in the state of Connecticut.

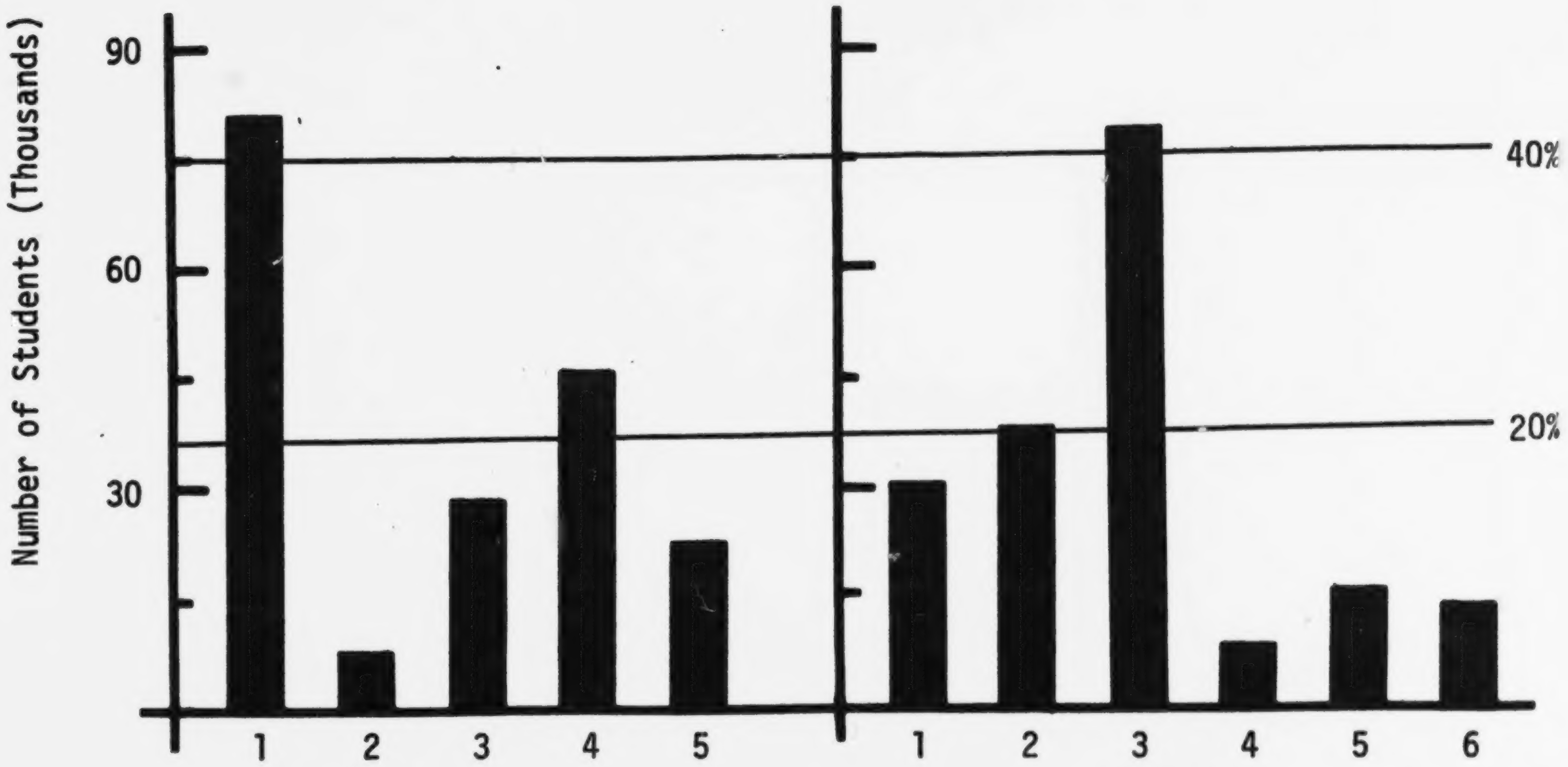
Figures IV.16, IV.17, and IV.18 present the public, private, and not-enrolled participants. The distribution of those proposed (Figures IV.10 and IV.11) and those actually participating (Figures IV.16 and

FIG. IV.14 TOTAL STUDENT PARTICIPANTS (Evaluation Data)

N = 186,448



(a) Project Type



(b) SMSA

(c) State

Major Variable Codes

Code	Major Project Type
1	Academic Instruction
2	Reading
3	Language Arts
4	Instructional Services
5	General Remedial
6	Vocational
7	Special Classes
8	School Readiness
9	Materials and Equipment
10	Guidance and Psychological Services
11	Non-Academic Services to Pupils
12	Library
13	Non-Academic Enrichment Activities
14	In-Service Training

Code	State
1	Connecticut
2	Maine
3	Massachusetts
4	New Hampshire
5	Rhode Island
6	Vermont

Code	SMSA
1	Metropolitan - core city
2	Metropolitan - more than 50,000
3	Metropolitan - less than 50,000
4	Non-Metropolitan - more than 2,500
5	Non-Metropolitan - less than 2,500

```
CROSS-TABULATION FOR TITLE I EVALUATIONS DATA                                TABLE NO. IV.9

  THE TABULATED VARIABLE IS TOTAL CHILD PARTICIPANTS    UNITS ARE PUPILS          GRAND COUNT    =          1120
                                                                                  GRAND MISSES   =           166
  SMSA TYPE ACROSS BY STATE DOWN                                                  GRAND TOTAL    =     186448.00

*          1              2              3              4              5
 *
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 2.14      24 I 0.36       4 I 4.64      52 I 3.84      43 I 1.07      12 I 12.05     135
 1 I   15173.00   I     542.00   I    9998.00   I    4254.00   I     531.00   I   30498.00
   I 18      8.14 I 1       0.29 I 6       5.36 I 3       2.28 I 0       0.28 I 28    16.36
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 1.52      17 I 0.         0 I 1.96      22 I 16.07    180 I 17.05    151 I 36.61     410
 2 I    8463.00   I       0.     I    2068.00   I   18369.00   I    9092.00   I   37992.00
   I 3       4.54 I 0       0.   I 0.      1.11 I 15      9.85 I 31      4.88 I 49    20.38
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 4.46      50 I 1.52      17 I 9.64     108 I 5.18      58 I 2.32      26 I 23.12     259
 3 I   47821.00   I    5963.00   I   11164.00   I    9002.00   I    5484.00   I   79189.00
   I 26     25.65 I 1       3.20 I 10      5.99 I 6       4.76 I 0.      2.94 I 43    42.47
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.36       4 I 0.         0 I 0.18       2 I 5.18      58 I 5.45      61 I 11.16     125
 4 I     228.00   I       0.     I      60.00   I    8757.00   I    3436.00   I    8440.00
   I 1       0.12 I 0       0.   I 1       0.03 I 6       4.70 I 24      1.84 I 40     4.53
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 1.07      12 I 0.27       3 I 2.68      30 I 1.07      12 I 0.36       4 I 5.45       61
 5 I    9071.00   I    1017.00   I    4887.00   I    1062.00   I     144.00   I   16181.00
   I 1       4.87 I 0       0.55 I 4       2.62 I 1       0.57 I 0       0.08 I 6      8.68
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.         0 I 0.         0 I 0.         0 I 5.62      63 I 5.98      67 I 11.61     130
 6 I       0.     I       0.     I       0.     I   10258.00   I    3890.00   I   14148.00
   I 0       0.   I 0       0.   I 0       0.   I 7       5.50 I 13      2.09 I 20     7.59
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I

     9.55     107   2.14      24  19.11     214  36.96     414  32.23     361      100.00   1120
       80756.00         7522.00       28177.00       47416.00       22577.00         186448.00
     49     43.31   2       4.03  21     15.11  46     25.43  68     12.11         166  100.00
```

```
CROSS-TABULATION FOR TITLE I EVALUATIONS DATA                          TABLE NO. IV.10

  THE TABULATED VARIABLE IS TOTAL CHILD PARTICIPANTS    UNITS ARE PUPILS            GRAND COUNT      =             1120
                                                                                    GRAND MISSES     =              186
  SMSA TYPE ACROSS BY MAJOR PROJECT TYPE DOWN                                       GRAND TOTAL      =        186448.00

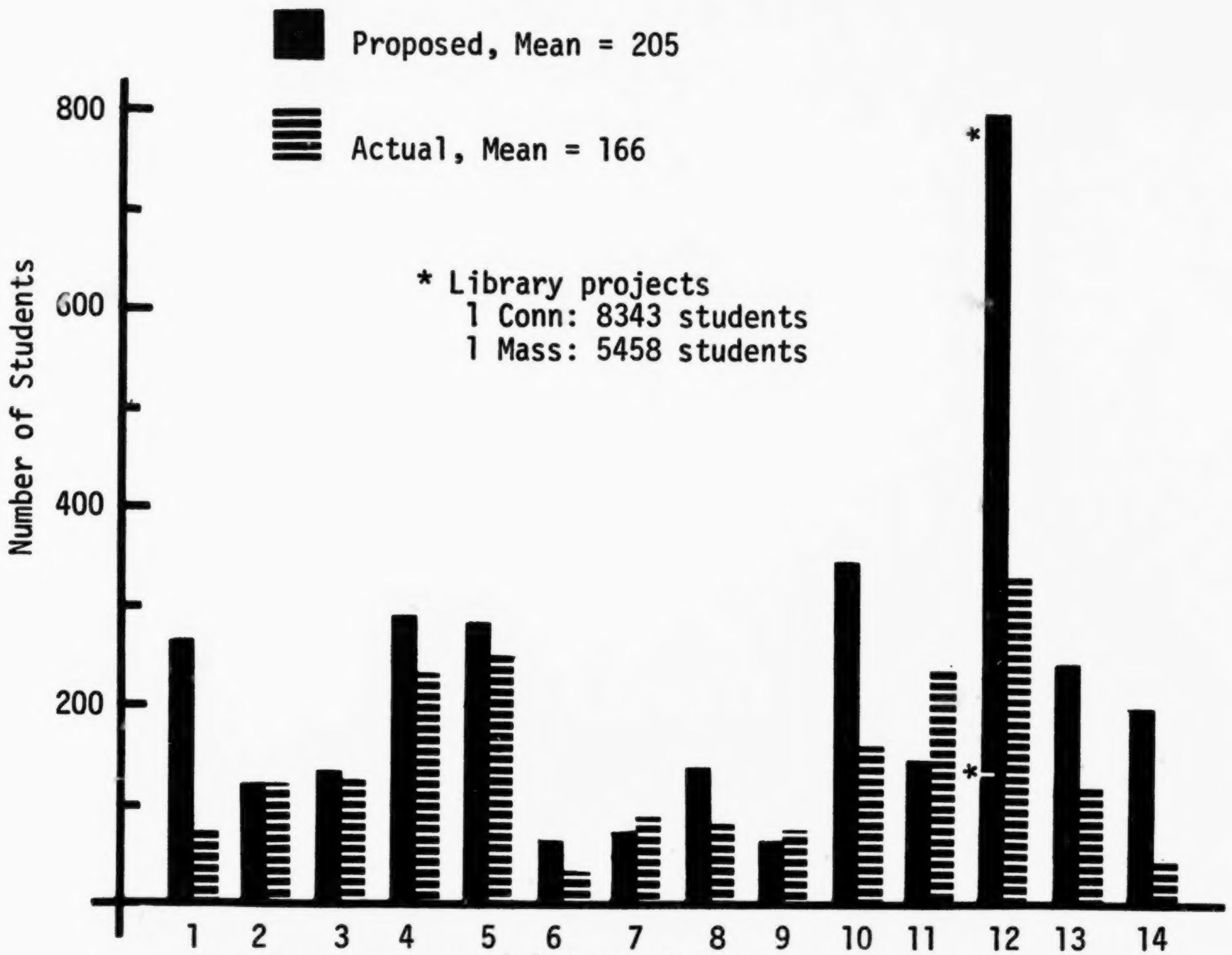
 *        1              2              3              4              5
  *
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.18       2 I 0.         0 I 0.71       8 I 1.43      16 I 1.52      17 I  3.84     43
 1 I     60.00    I       0.     I     496.00   I     1895.00  I     654.00   I    3105.00
   I   3     0.03 I   0    0.    I   0     0.27 I 0       1.02 I   3     0.35 I  6     1.67
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 1.52      17 I 0.36       4 I 4.46      50 I 10.36    116 I 9.11     102 I 25.80    289
 2 I   11213.00   I    1793.00   I   7515.00    I   9436.00    I    5507.00   I  35464.00
   I   6     6.01 I   0    0.96  I 9     4.03   I 11      5.06 I 19      2.95 I 45    19.02
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.71       8 I 0.09       1 I 1.96      22 I 3.30      37 I 2.50      28 I 8.57     96
 3 I    3435.00   I     350.00   I   2015.00    I   4785.00    I   1120.00    I  11705.00
   I   2     1.84 I   0    0.19  I 1     1.08   I 2       2.57 I 2       0.60 I 7      6.28
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.18       2 I 0.09       1 I 0.36       4 I 1.34      15 I 2.77      31 I 4.73     53
 4 I    8197.00   I      29.00   I    385.00    I   1474.00    I   2249.00    I  12334.00
   I   3     4.40 I   0    0.02  I 0     0.21   I 2       0.79 I 9       1.21 I 14     6.62
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 3.93      44 I 0.80       9 I 7.23      81 I 10.54    118 I 9.55     107 I 32.05    359
 5 I   43484.00   I    3644.00   I  13840.00    I  19185.00    I   5441.00    I  89594.00
   I   9    23.32 I   0    1.95  I 6     7.42   I 13      0.61 I 11      5.06 I 39    48.05
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.45       5 I 0.09       1 I 0.45       5 I 2.50      28 I 0.71       8 I 4.20     47
 6 I     374.00   I      21.00   I     75.00    I   1136.00    I    232.00    I   1838.00
   I   1     0.20 I   1    0.01  I 0     0.04   I 1       0.61 I 1       0.12 I 4      0.99
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.36       4 I 0.09       1 I 0.45       5 I 1.43      16 I 0.45       5 I 2.77     31
 7 I    1636.00   I     251.00   I    209.00    I    549.00    I    258.00    I   2903.00
   I   2     0.88 I   0    0.13  I 1     0.11   I 6       0.29 I 4       0.14 I 13     1.56
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.45       5 I 0.18       2 I 1.61      18 I 1.16      13 I 0.98      11 I 4.37     49
 8 I    1303.00   I     437.00   I   1453.00    I    730.00    I    233.00    I   4156.00
   I   5     0.70 I   0    0.23  I 2     0.78   I 0       0.39 I 4       0.12 I 11     2.23
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
```

CROSS-TABULATION FOR TITLE I EVALUATIONS DATA TABLE NO. IV.10 (continued)

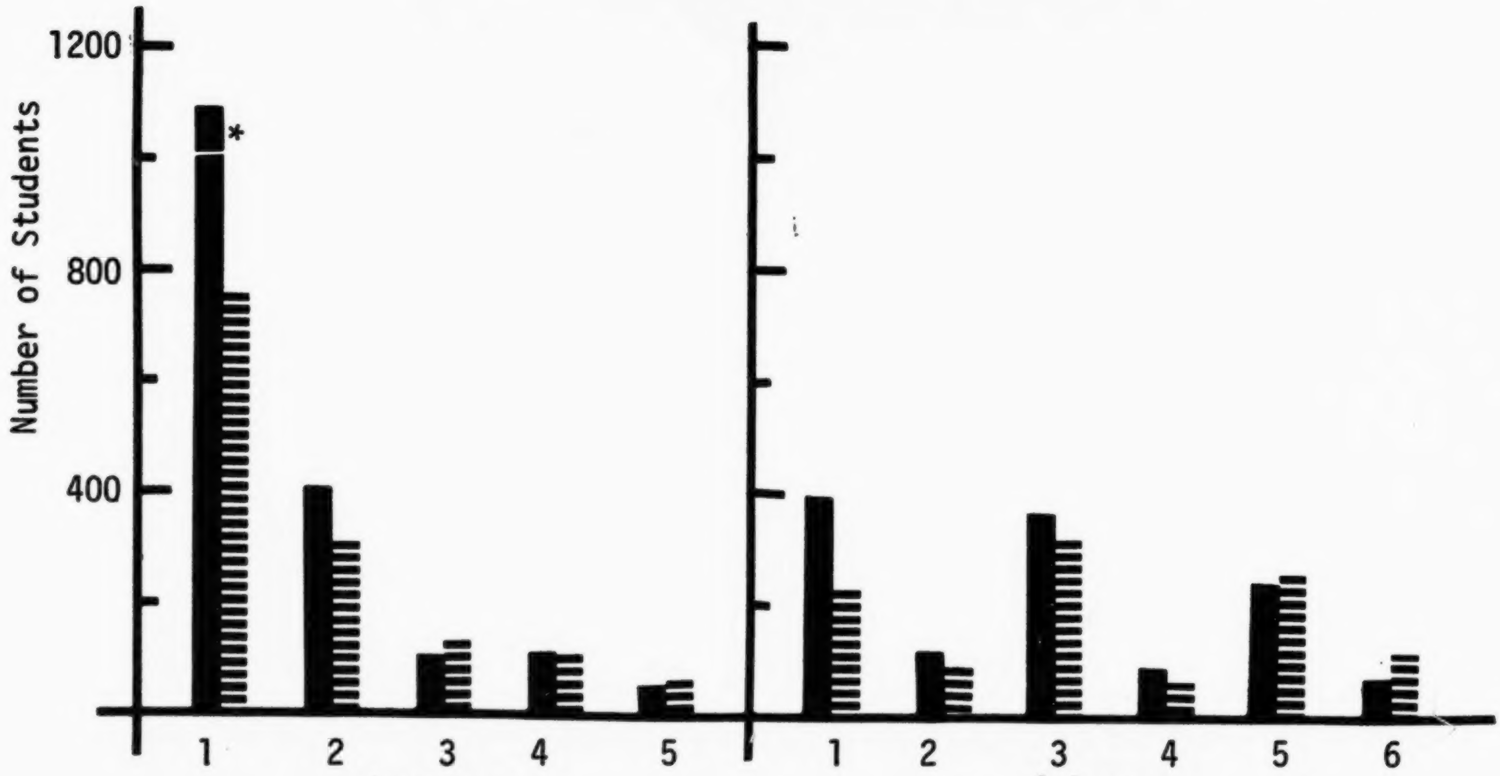
```
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 0.09        1 I 0.09        1 I 0.18        2 I 0.36        4 I 1.16       13 I 1.87       21
 9 I    312.00     I     31.00     I    507.00     I    161.00     I    584.00     I   1595.00
   I  1     0.17   I  0     0.02   I  0     0.27   I  1     0.09   I  5     0.31   I  7     0.86
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 0.36        4 I 0.09        1 I 0.71        8 I 1.34       15 I 0.54        6 I 30.4       34
10 I   2706.00     I    225.00     I    946.00     I   1480.00     I    266.00     I   5623.00
   I  4     1.45   I  0     0.12   I  1     0.51   I  6     0.79   I  2     0.14   I 13     3.02
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 0.45        5 I 0.          0 I 0.09        1 I 1.16       13 I 0.71        8 I 2.41       27
11 I   1649.00     I       0.      I    128.00     I   4167.00     I    512.00     I   6456.00
   I  0     0.88   I  0     0.     I  0     0.07   I  0     2.23   I  3     0.27   I  3     3.46
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 0.09        1 I 0.09        1 I 0.09        1 I 0.71        8 I 0.54        6 I 1.52       17
12 I   3595.00     I    241.00     I     76.00     I   1403.00     I    297.00     I   5612.00
   I  1     1.93   I  0     0.13   I  1     0.04   I  0     0.75   I  1     0.16   I  3     3.01
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 0.80        9 I 0.18        2 I 0.71        8 I 1.25       14 I 1.52       17 I 4.46       50
13 I   2792.00     I    500.00     I    497.00     I    515.00     I   1180.00     I   5484.00
   I  8     1.50   I  0     0.27   I  0     0.27   I  3     0.49   I  3     0.63   I 14     3.16
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I
   I               I               I               I               I               I
   I 0.          0 I 0.          0 I 0.09        1 I 0.09        1 I 0.18        2 I 0.36        4
14 I       0.      I       0.      I     35.00     I    100.00     I     44.00     I    179.00
   I  4     0.     I  1     0.     I  0     0.02   I  1     0.05   I  1     0.02   I  7     0.10
   I               I               I               I               I               I
   I---------------I---------------I---------------I---------------I---------------I

     9.55      107   2.14       24   19.11      214  36.96      414  32.23      361     100.00    1120
      80756.00          7522.00         28177.00        47416.00        22577.00           186448.00
     49      43.31    2      4.03    21      15.11   46      25.43   68      12.11       186    100.00
```

FIG. IV.15 MEAN PROJECT ENROLLMENT



(a) Project Type

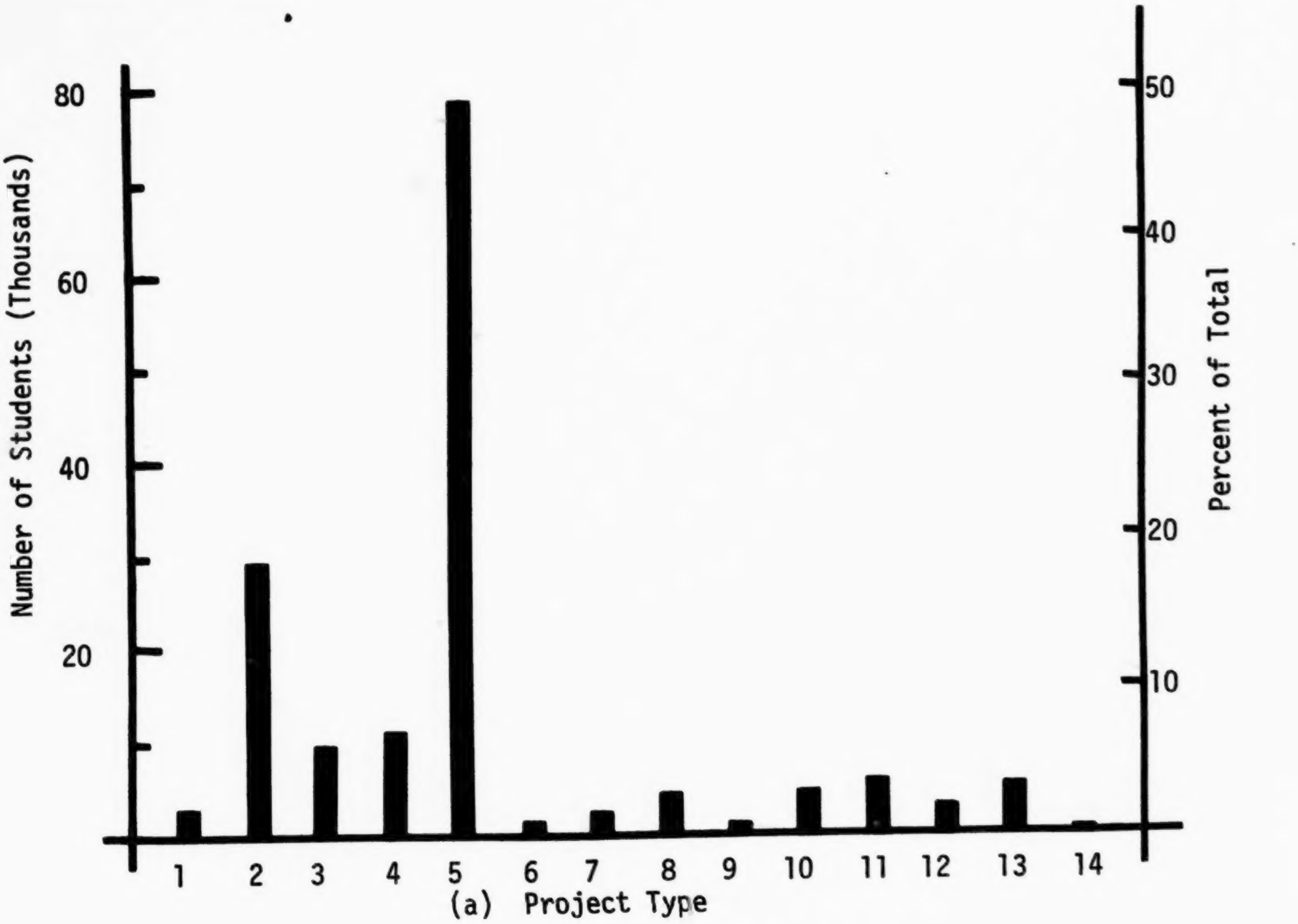


(b) SMSA

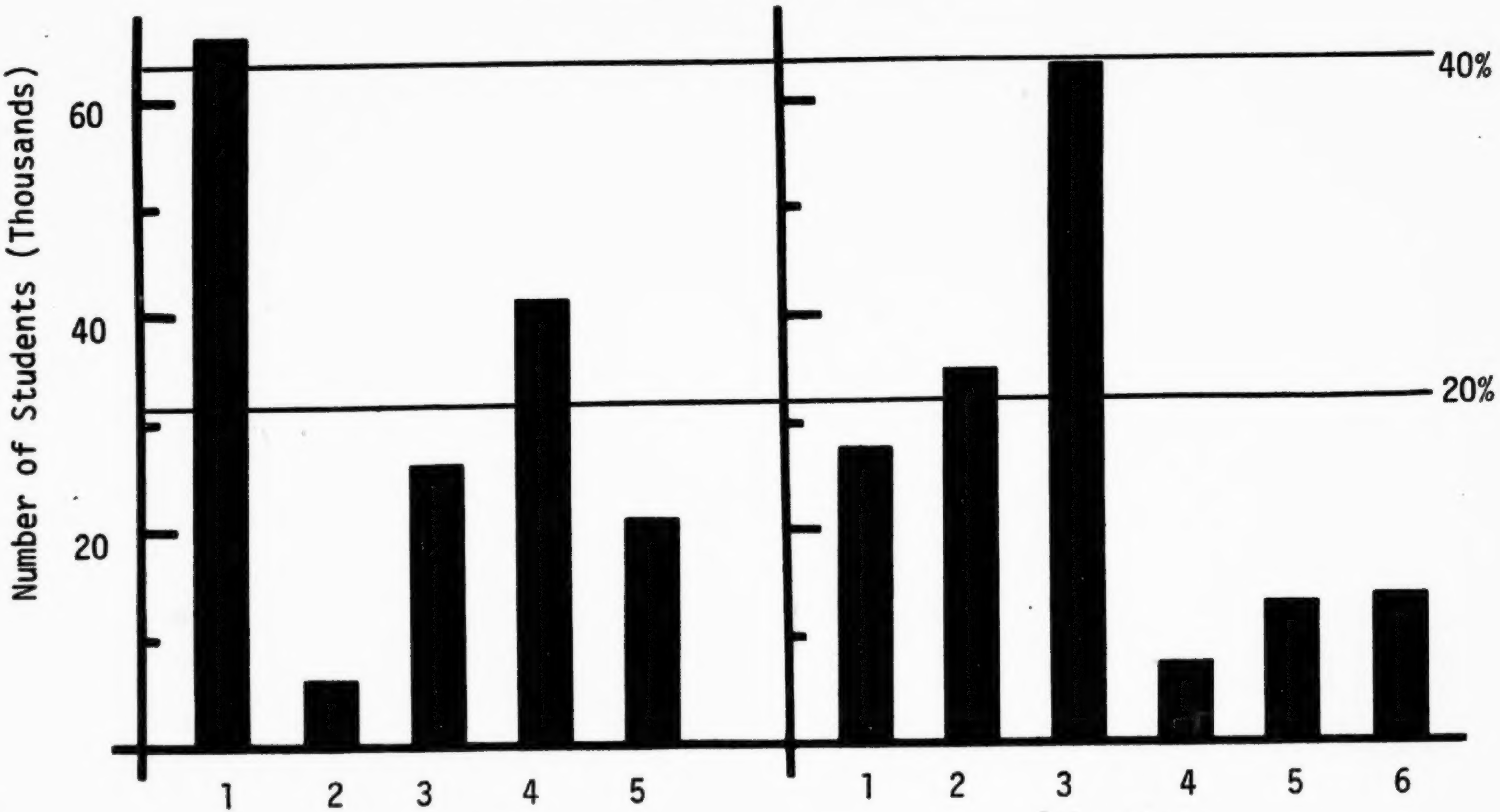
(c) State

FIG. IV.16 PUBLIC SCHOOL STUDENT PARTICIPANTS (Evaluation Data)

N = 160,119



(a) Project Type

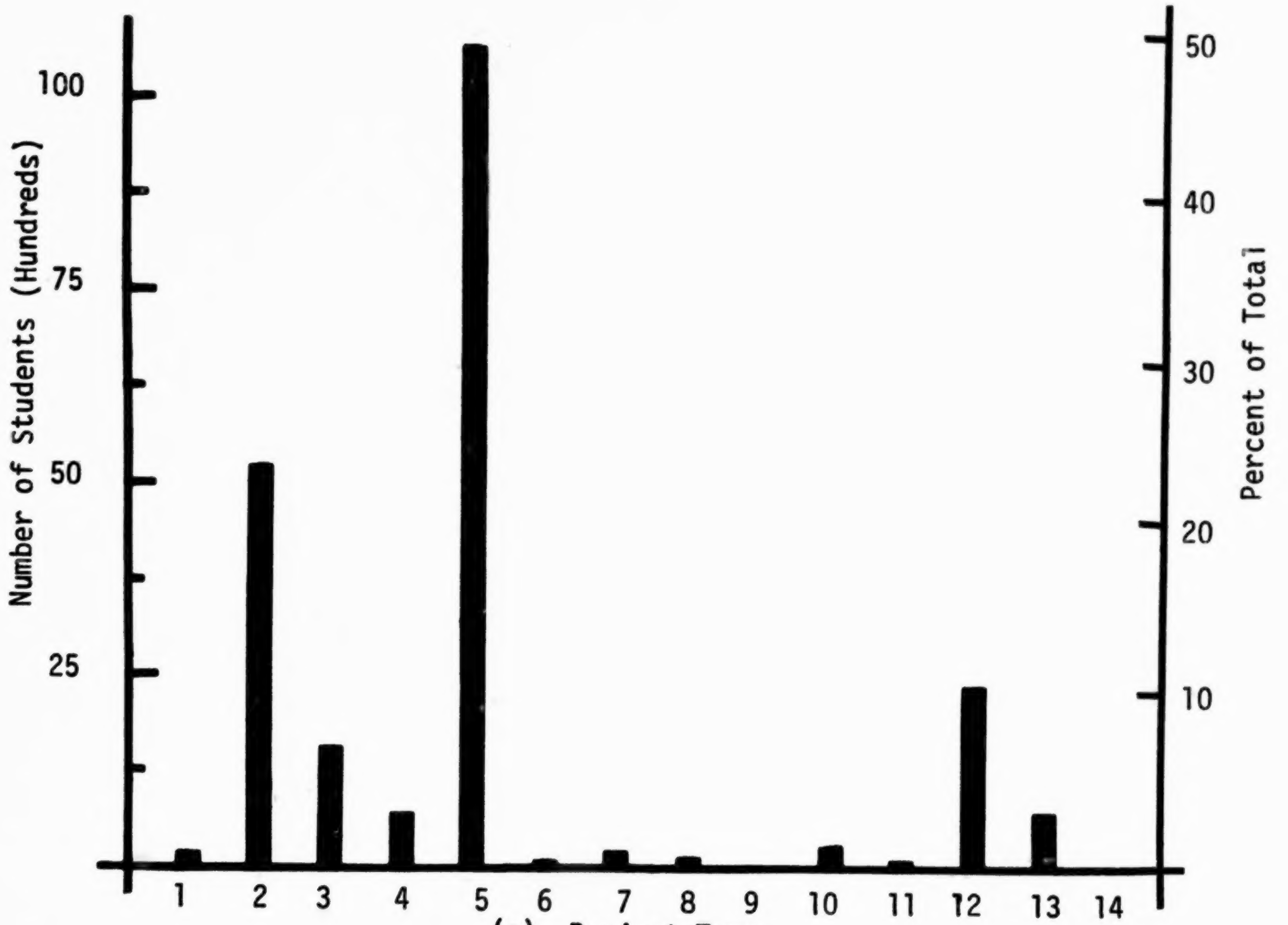


(b) SMSA

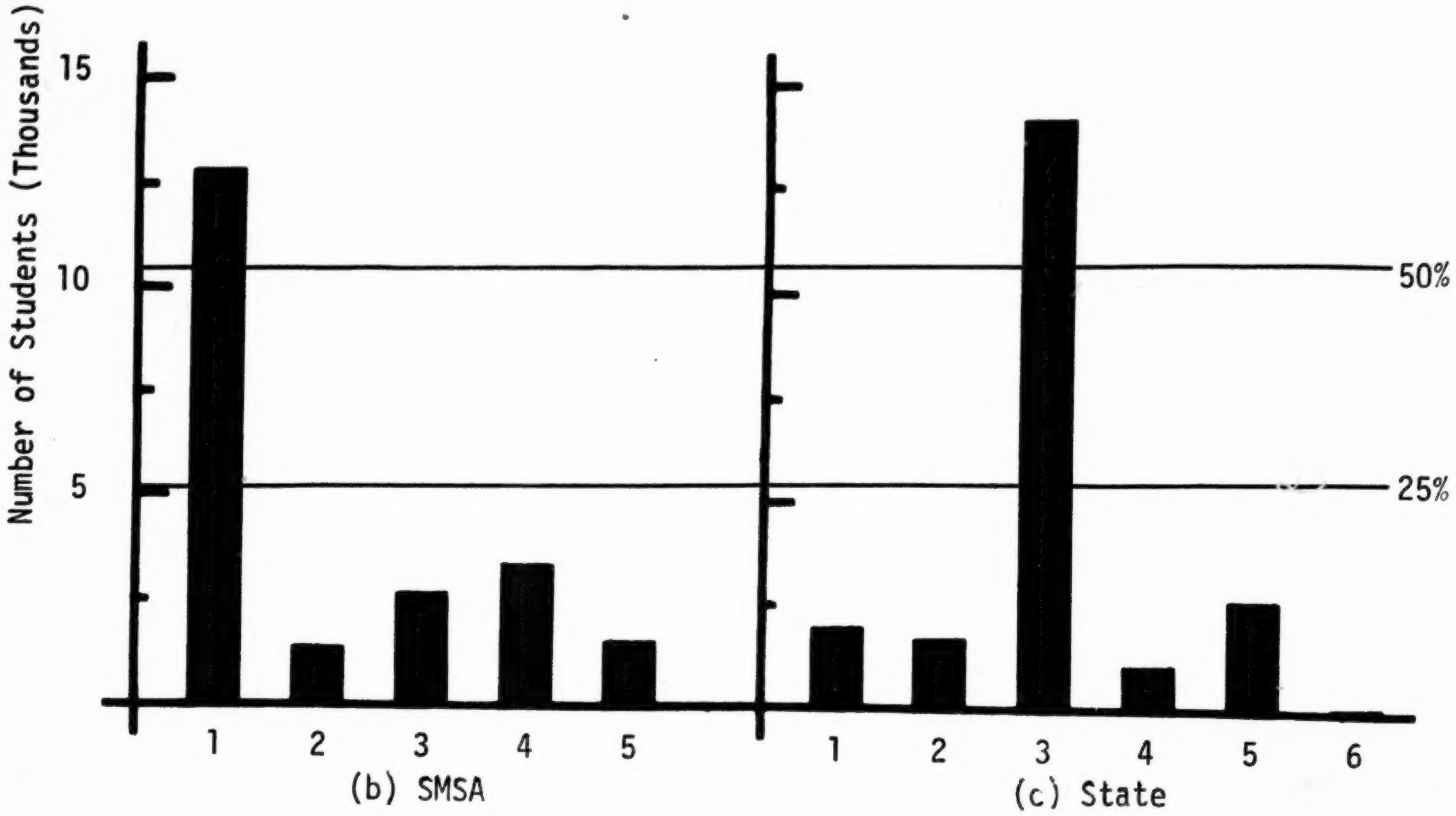
(c) State

FIG. IV.17 PRIVATE SCHOOL STUDENT PARTICIPANTS (Evaluation Data)

N = 21,885



(a) Project Type

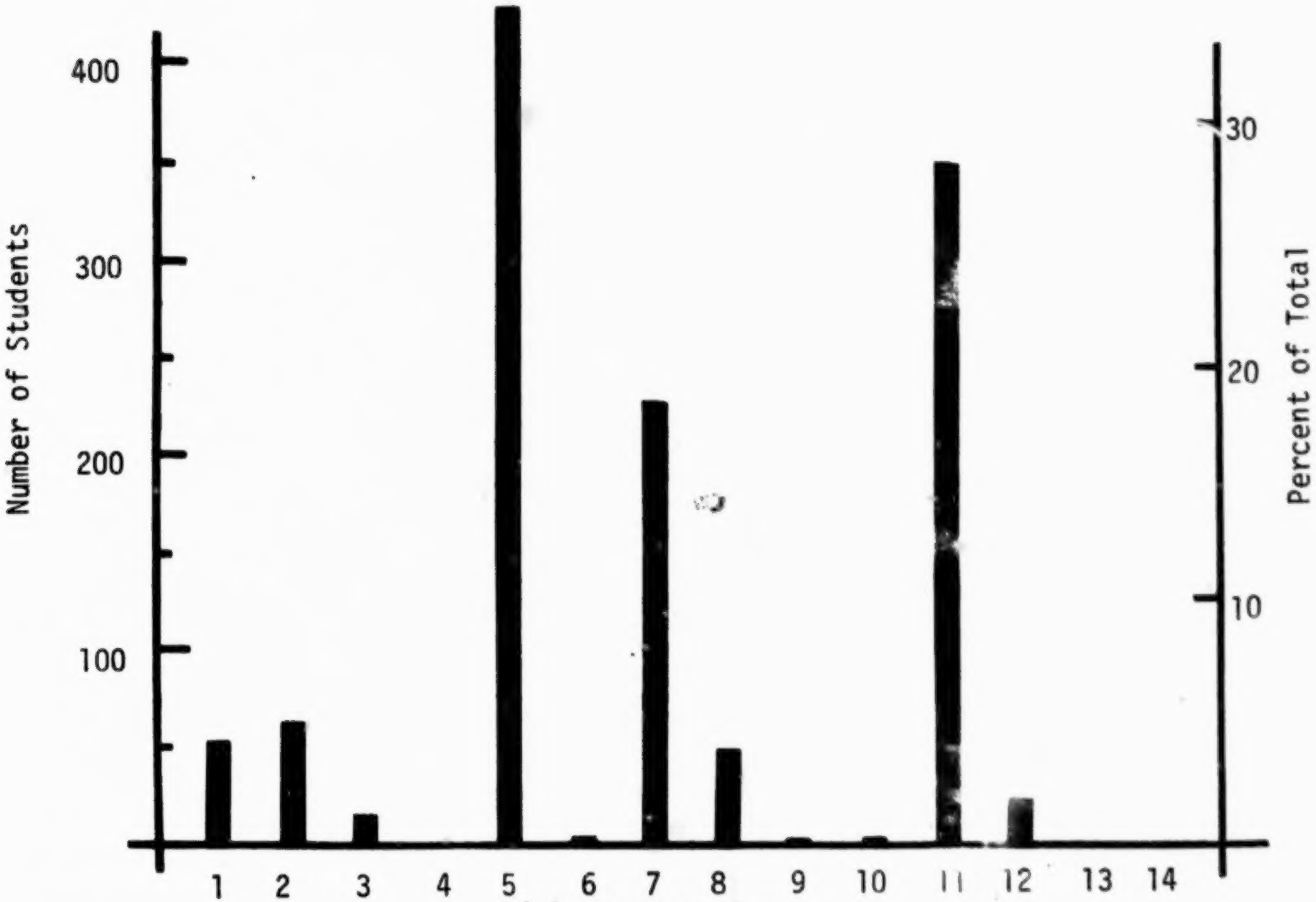


(b) SMSA

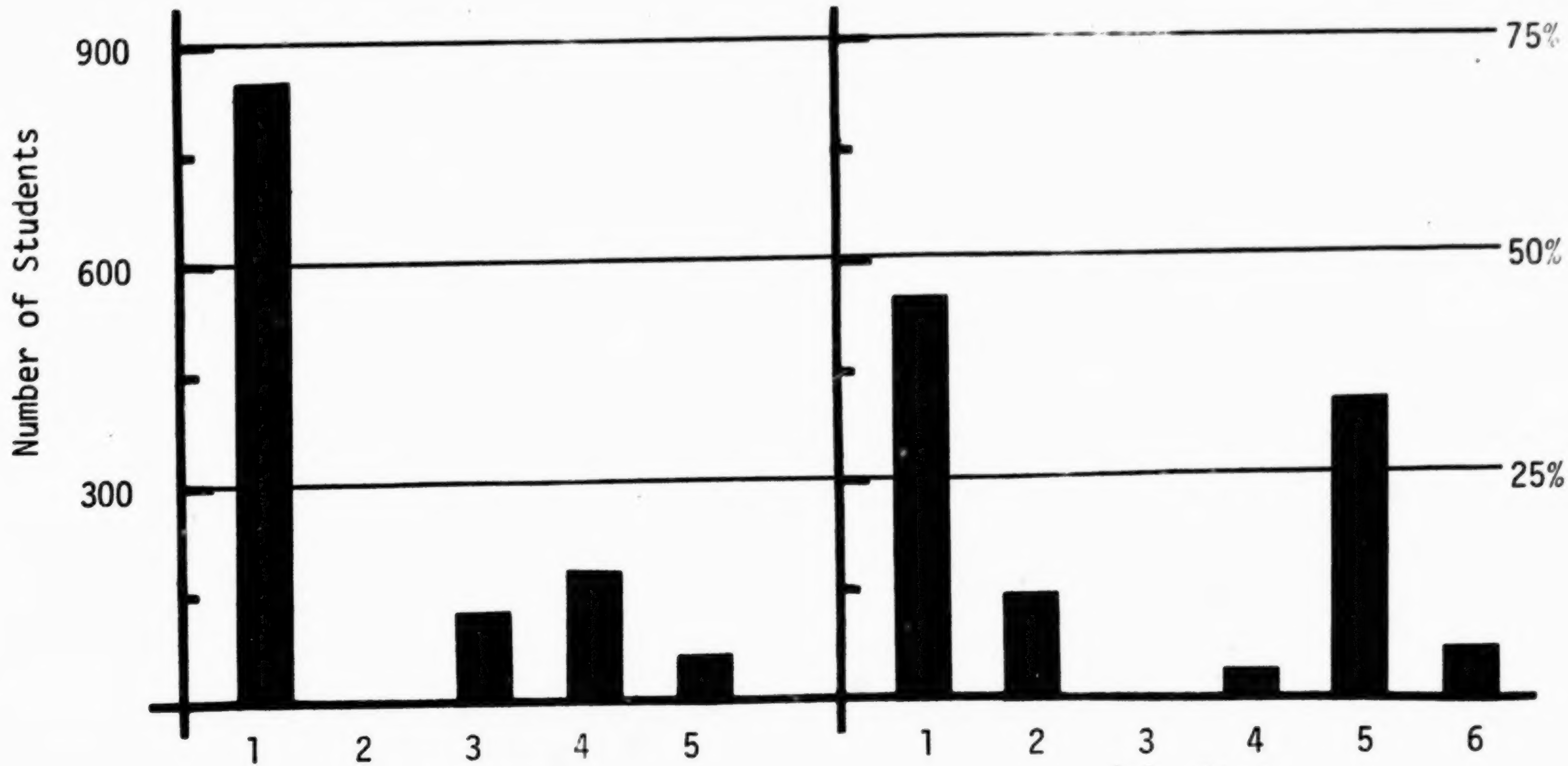
(c) State

FIG. IV.18 STUDENT PARTICIPANTS NOT ENROLLED IN ANY SCHOOL (Evaluation Data)

N = 1,213



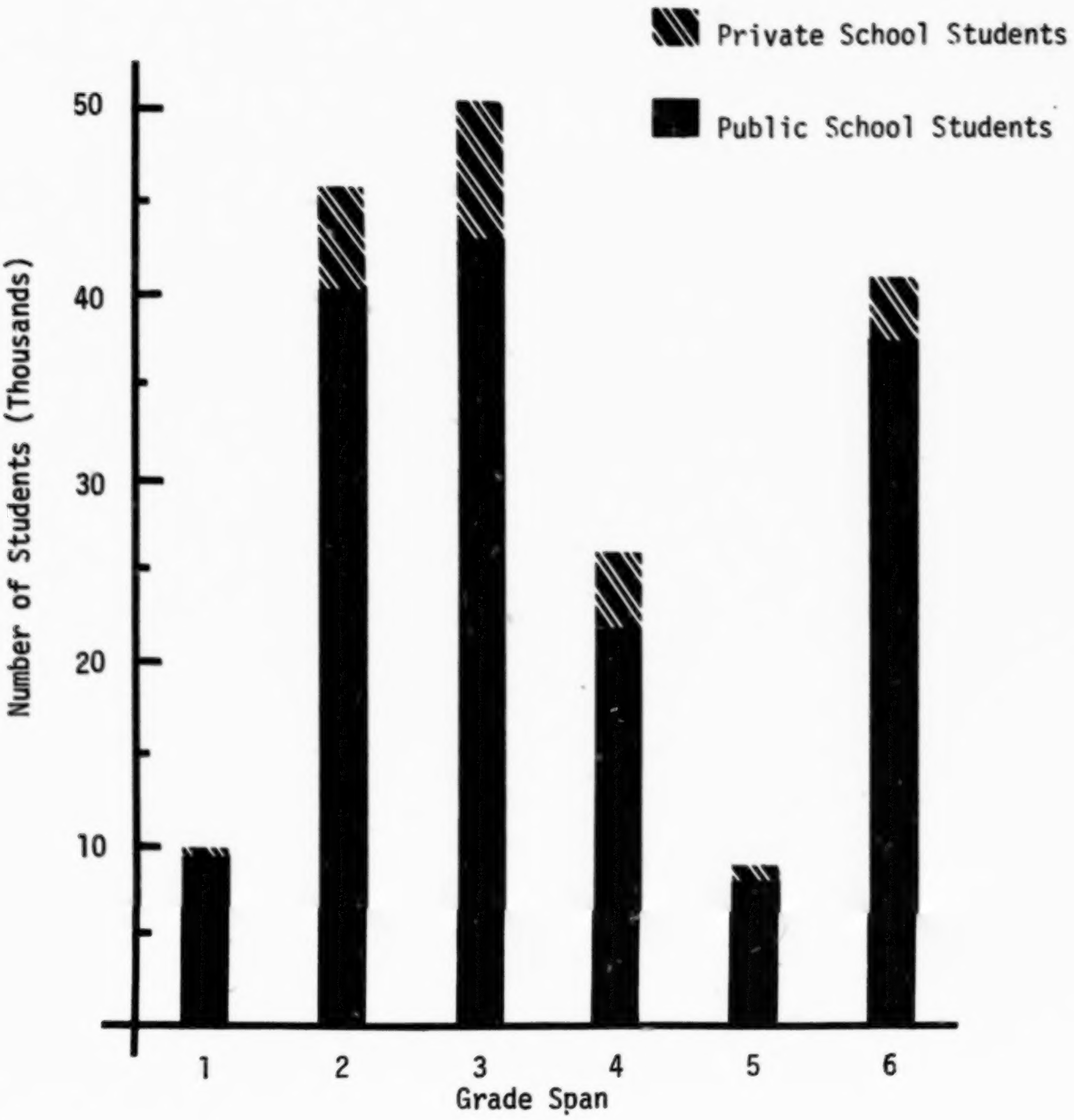
(a) Project Type



(b) SMSA

(c) State

FIG. IV.19 PUBLIC AND PRIVATE SCHOOL STUDENT PARTICIPANTS, BY GRADE SPANS



GRADE SPANS

1. Primarily pre-school and kindergarten
2. Primarily grades 1-3
3. Primarily grades 4-6
4. Primarily grades 7-9
5. Primarily grades 10-12
6. Six or more grades included

Note: An enrollment which was equally split between two spans (3-4 or 8-11) was assigned to the lower span.

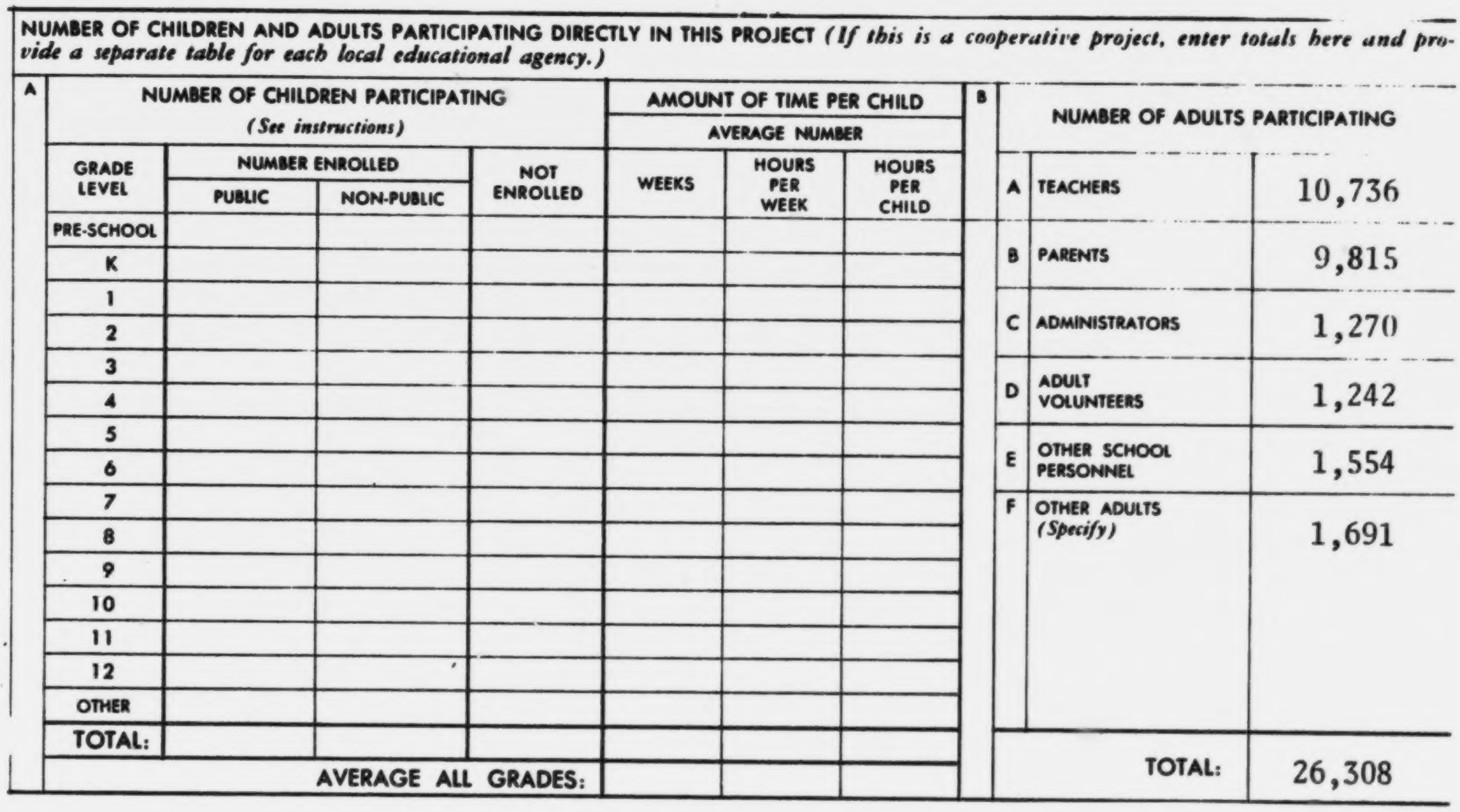
IV.17) is similar, the spread of not-enrolled children on the other hand shifted considerably. The data on unenrolled children may have contributed to these weaknesses in changes as much as real changes in enrollment plans. Half of the evaluation reports did not request information on these children specifically and there was some ambiguity in both the applications and the evaluations about how to classify pre-school-aged children. Thus, any conclusions about the changes in the patterns of these participants could be misleading. Actual enrollments were requested by individual grade in only two of the state evaluation forms. The grade spans reported have been grouped into six divisions. While projects reported enrollment by individual grade, some projects reported their enrollment only in grade spans - some as large as K - 12. Any project reporting five or less grades together was included in the span which covered the most grades being reported. An enrollment which was equally split between two spans (3-4 or 8-11) was assigned to the lower span. Figure IV.19 illustrates the span distribution of public and private school participants. The enrollments remained heaviest in the primary grades and dropped at the secondary level, following the proposed concentration of project participants in the elementary schools found in the applications.

IV.3.3 Adult Participants

The application form also requested information on the numbers of adults anticipated either as recipients of Title I sponsored services or, in the case of school staff, as participants in related inservice training programs. Seven hundred twenty-three (723) of the 1302 projects (56%) responded to this item proposing a total of 26,308 adult project participants. The subgroup totals for this item are presented in Table IV.11 below.

TABLE IV.11 PROPOSED NUMBER OF ADULT PARTICIPANTS

(From page 1, Section A - Project Information of the FY66 Title I application form)



NUMBER OF CHILDREN AND ADULTS PARTICIPATING DIRECTLY IN THIS PROJECT *(If this is a cooperative project, enter totals here and provide a separate table for each local educational agency.)*

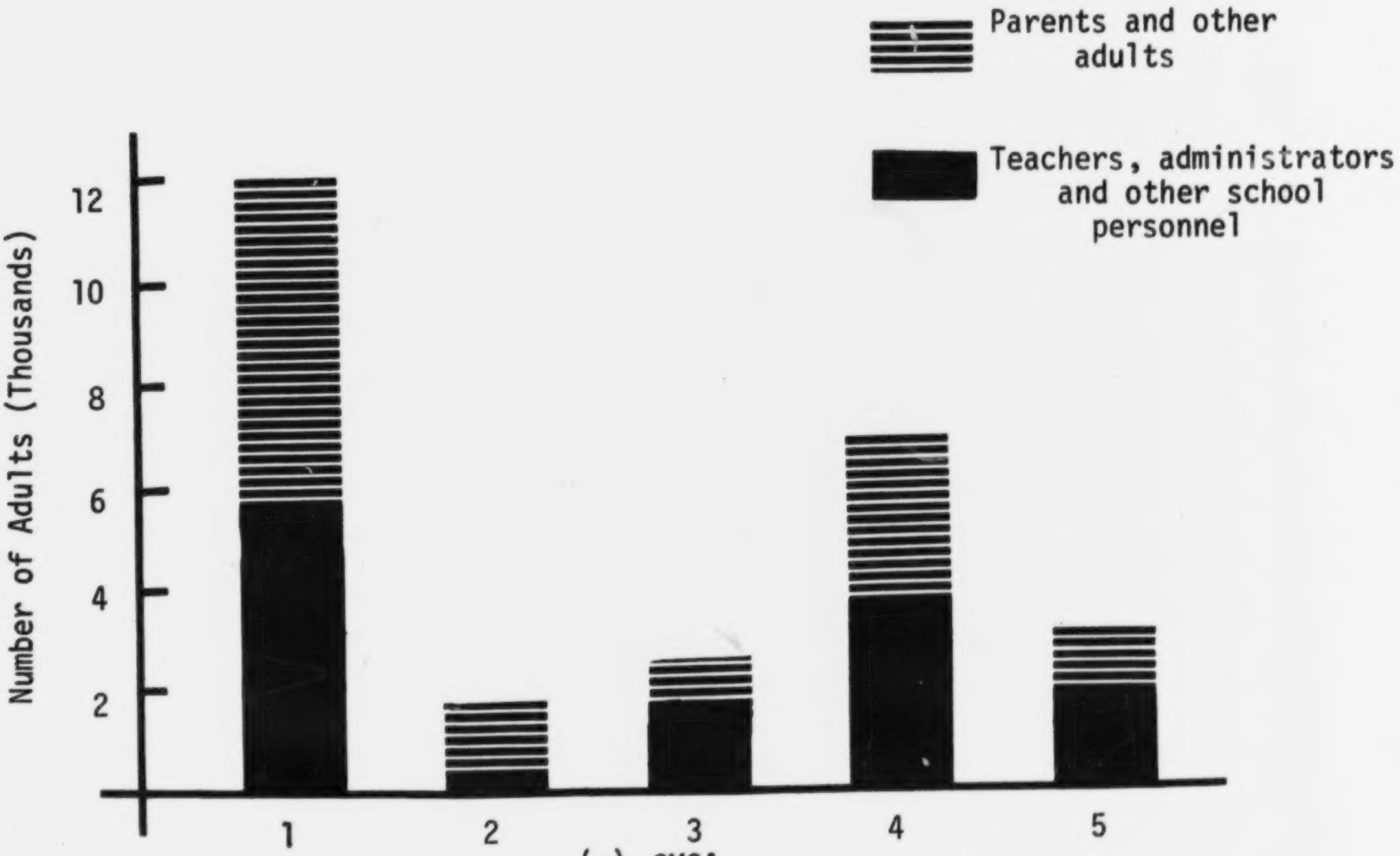
A	NUMBER OF CHILDREN PARTICIPATING *(See instructions)*			AMOUNT OF TIME PER CHILD		
				AVERAGE NUMBER		
GRADE LEVEL	NUMBER ENROLLED		NOT ENROLLED	WEEKS	HOURS PER WEEK	HOURS PER CHILD
	PUBLIC	NON-PUBLIC				
PRE-SCHOOL						
K						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
OTHER						
TOTAL:						
AVERAGE ALL GRADES:						

B	NUMBER OF ADULTS PARTICIPATING	
A	TEACHERS	10,736
B	PARENTS	9,815
C	ADMINISTRATORS	1,270
D	ADULT VOLUNTEERS	1,242
E	OTHER SCHOOL PERSONNEL	1,554
F	OTHER ADULTS *(Specify)*	1,691
	TOTAL:	26,308

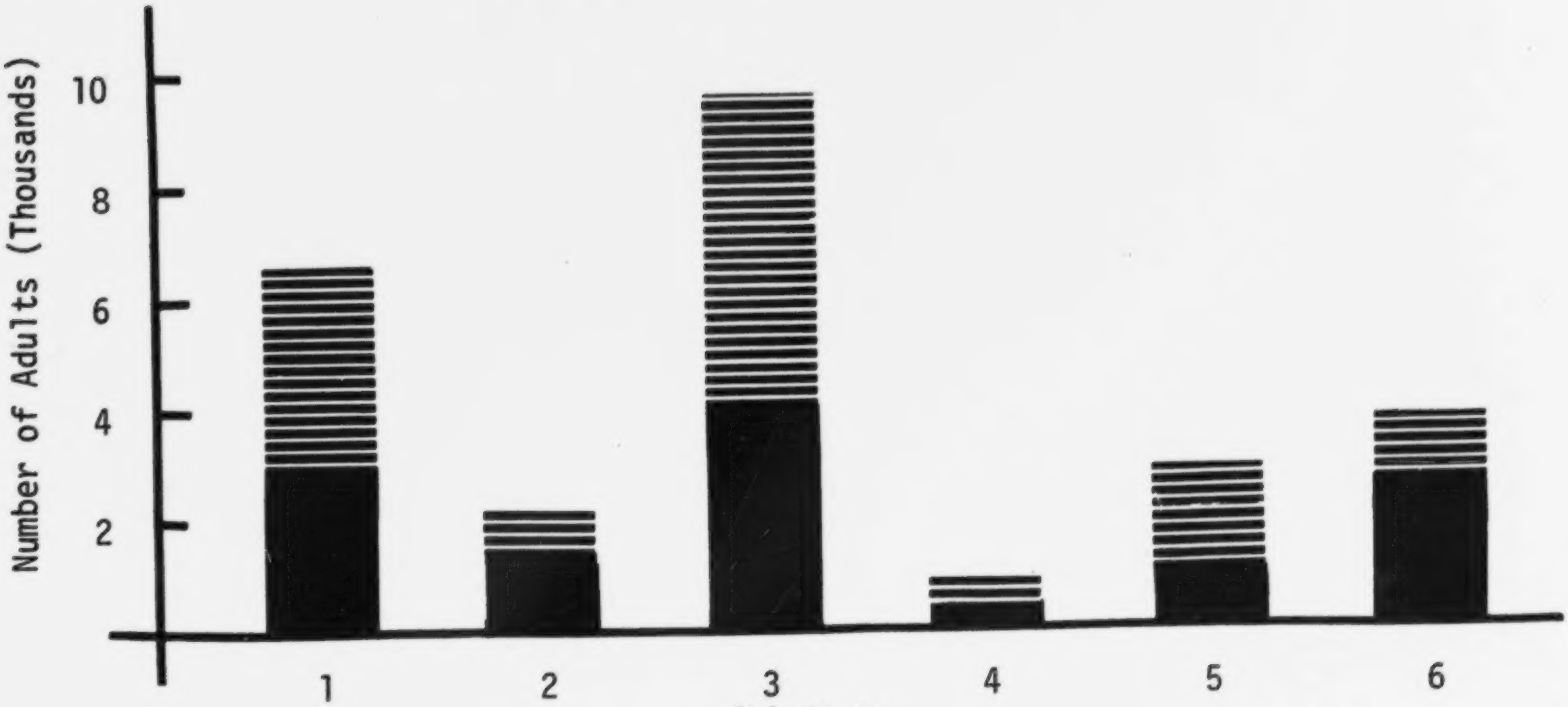
These data on adult participants, however, are of questionable accuracy. Although the guidelines accompanying the FY66 applications explained the definition of "adult participant," the item as it appeared in the application form was ambiguous (see Table IV.11). It appears to have been frequently misinterpreted as a request for the numbers of

FIG. IV.20 ADULT PARTICIPANTS (Application Data)

No. of Adults = 26,308
No. of Projects = 723



(a) SMSA



(b) State

```
CROSS-TABULATION FOR TITLE I APPLICATION DATA                          TABLE NO.  IV.12

 THE TABULATED VARIABLE IS TOTAL ADULT PARTICIPANTS    UNITS ARE PERSONS            GRAND COUNT      =          723
                                                                                    GRAND MISSES     =          579
 SMSA TYPE ACROSS BY MAJOR PROJECT TYPE DOWN                                        GRAND TOTAL      =     26308.00
                                                                                    GRAND MEAN       =        36.39
                                                                                    GRAND STD. DEV.  =        96.29
*        1              2              3              4              5              GRAND RANGE      =      1496.00
 *
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 0.55       4 I 0.         0 I 0.69       5 I 1.24       9 I 0.83       6 I 3.32       24 M =       35.46
1 I     380.00   I         0.   I      47.00   I     382.00   I      42.00   I     851.00    S =       57.49
  I    1    1.44 I    0    0.   I    3    0.18 I    6    1.45 I   14    0.16 I  24     3.23 R =      281.CC
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 2.07      15 I 0.41       3 I 4.29      31 I 9.96      72 I 9.54      69 I 26.28     190 M =       17.53
2 I    1024.00   I     647.00   I     493.00   I     835.00   I     332.00   I    3331.00    S =       50.36
  I    8    3.89 I    1    2.46 I   28    1.87 I   54    3.17 I   52    1.26 I 143    12.66 R =      471.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 0.55       4 I 0.         0 I 1.66      12 I 2.63      19 I 2.63      19 I 7.47       54 M =       17.48
3 I     255.00   I         0.   I     130.00   I     364.00   I     195.00   I     944.00    S =       32.77
  I    6    0.97 I    1    0.   I   11    0.49 I   20    1.38 I   11    0.74 I  49     3.59 R =      218.CC
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 0.41       3 I 0.14       1 I 0.28       2 I 0.97       7 I 2.63      19 I 4.43       32 M =       17.25
4 I     351.00   I       4.00   I      23.00   I      77.00   I      97.00   I     552.00    S =       48.19
  I    2    1.33 I    0    0.02 I    2    0.09 I    9    0.29 I   21    0.37 I  34     2.10 R =      277.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 4.56      33 I 0.28       2 I 6.09      44 I 11.07     80 I 8.99      65 I 30.98     224 M =       42.23
5 I    3474.00   I     350.00   I    1078.00   I    3579.00   I     978.00   I    9459.00    S =       70.00
  I   20   13.21 I    7    1.33 I   43    4.10 I   51   13.60 I   53    3.72 I 174    35.95 R =      499.0C
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 0.41       3 I 0.14       1 I 0.14       1 I 1.38      10 I 0.97       7 I 3.04       22 M =        6.64
6 I       5.00   I       4.00   I       4.00   I      65.00   I      68.00   I     146.00    S =       12.15
  I    3    0.02 I    1    0.02 I    4    0.02 I   18    0.25 I    2    0.26 I  28     C.55 R =       48.0C
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 0.55       4 I C.         0 I 0.41       3 I 1.52      11 I 0.69       5 I 3.18       23 M =       22.04
7 I     356.00   I         0.   I      42.00   I      84.00   I      25.00   I     507.0C    S =       43.28
  I    2    1.35 I    1    C.   I    3    0.16 I   11    0.32 I    4    0.10 I  21     1.93 R =      181.CC
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I 0.83       6 I 0.14       1 I 2.07      15 I 0.83       6 I 1.66      12 I 5.53       40 M =       71.22
8 I    1653.00   I     575.00   I     508.00   I      59.00   I      54.00   I    2849.00    S =      146.28
  I    4    6.28 I    1    2.19 I    5    1.93 I    7    0.22 I    3    0.21 I  20    10.83 R =      599.CC
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
```

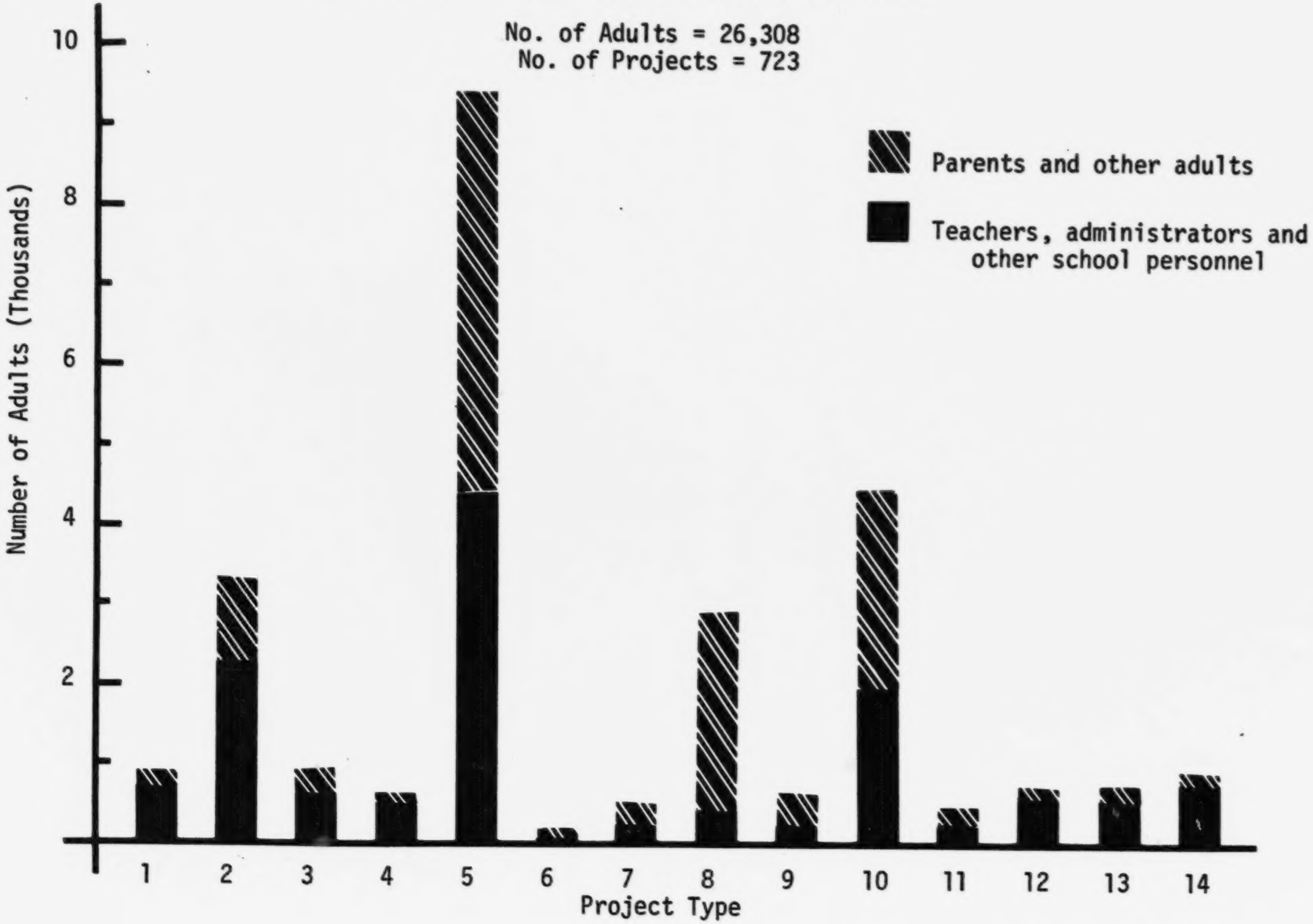
CROSS-TABULATION FOR TITLE I APPLICATION DATA   TABLE NO. IV.12 (continued)

```
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.14       1 I 0.14       1 I 0.28       2 I 0.41       3 I 1.11       8 I 2.07       15 M =      37.67
 9 I     81.00    I     10.00    I     18.00    I    175.00    I    281.00    I     565.CC  S =      67.8C
   I   1     0.31 I   0     C.04 I   0     0.07 I   2     0.67 I  10     1.07 I 13     2.15 R =     249.0C
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.97       7 I C.         0 I 0.41       3 I 1.94      14 I C.69       5 I 4.01       29 M =     153.14
10 I   2683.00    I       C.     I     52.00    I    762.00    I    944.00    I    4441.00  S =     322.85
   I   1    10.20 I   1     C.   I   6     0.20 I   7     2.90 I   3     3.59 I 18    16.88 R =    1496.0C
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.41       3 I C.         0 I 0.         0 I 0.83       6 I 1.11       8 I 2.35       17 M =      28.47
11 I    133.00    I       0.     I       0.     I    307.00    I     44.00    I     484.CC  S =      47.11
   I   2     0.51 I   0     0.   I   1     0.   I   7     1.17 I   3     C.17 I 13     1.84 R =     19C.CC
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.28       2 I 0.14       1 I 0.14       1 I 0.55       4 I C.28       2 I 1.38       1C M =      64.2C
12 I    461.00    I     10.00    I     26.00    I    143.00    I      2.00    I     642.CC  S =      88.42
   I   0     1.75 I   0     0.04 I   1     0.10 I   4     0.54 I   5     0.01 I 10     2.44 R =     262.CC
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 1.24       9 I 0.14       1 I 0.69       5 I 1.24       9 I 1.11       8 I 4.43       32 M =      22.41
13 I    457.00    I      3.00    I    149.00    I     62.00    I     46.00    I     717.CC  S =      40.48
   I   8     1.74 I   1     C.01 I   3     0.57 I   8     0.24 I  12     C.17 I 32     2.73 R =     219.CC
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.55       4 I C.14       1 I 0.14       1 I 0.28       2 I C.41       3 I 1.52       11 M =      74.55
14 I    697.00    I      9.00    I      7.00    I     79.00    I     28.00    I     82C.CC  S =     114.49
   I   0     2.65 I   0     0.03 I   0     0.03 I   0     0.30 I   0     0.11 I  0     3.12 R =     413.CC
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I

    13.55      98  1.66       12  17.29     125  34.85     252  32.64     236      1CC.CC     723
      12010.00        1612.00         2577.00         6973.00         3136.00         26308.CC
      58   45.65    14     6.13   110     9.80   204    26.51   193    11.92        579  1CC.CC

   M =     122.55 M =     134.33 M =      20.62 M =      27.67 M =      13.29      M =      36.39
   S =     194.03 S =     186.04 S =      24.77 S =      48.73 S =      61.89      S =      96.29
   R =    1496.00 R =     572.0C R =     132.00 R =     383.0C R =     899.0C      R =    1496.CC
```

FIG. IV.21 ADULT PARTICIPANTS (Application Data)



No. of Adults = 26,308
No. of Projects = 723

project staff. Many LEAs responded by reporting all adults contributing to project activities, including those teaching and acting as aides, whether or not they were also receiving services or training. It is interesting that the number of projects recording staff groups alone in this item was 2 1/2 times greater than the number of projects proposing to utilize any part of their Title I funds for in-service training. The indications are that the adult participant data are probably unreliable indices of either the number of adults receiving services through Title I or of the number assisting in project activities. Since none of the six state evaluation forms provided for a systematic collection of follow-up data on adult project participants, there was no information upon the numbers who were finally served in actual operation of projects.

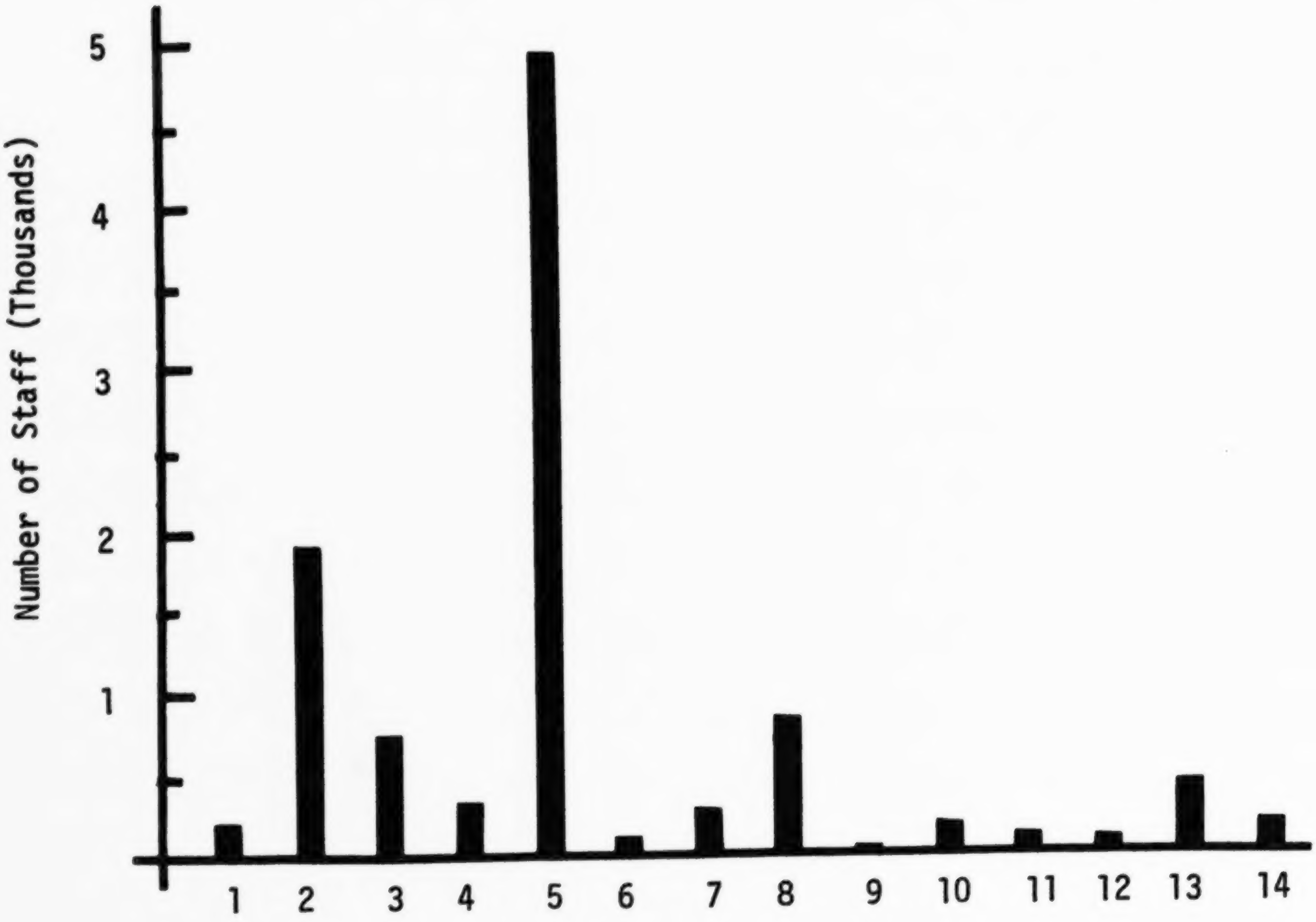
Nonetheless, the data on total adult participants as reported in this item are presented in Table IV.12 for the SMSA by project type breakdowns. The distributions of school staff and other adults are illustrated in Figure IV.20 and Figure IV.21. The number of adults proposed is proportionately high for "School Readiness" (#8) projects and for "Guidance and Counseling" (#10) projects. While these two groups of projects combined comprised only 10% of all projects, requested only 8% of all approved funds, and proposed only 9% of the student enrollment, they proposed nearly 28% of the adult participants. Most of these were parents who, particularly in the "Guidance and Counseling" projects, could conceivably have been involved in home-school social work services or in family counseling programs.

IV.4 STAFFING PATTERNS

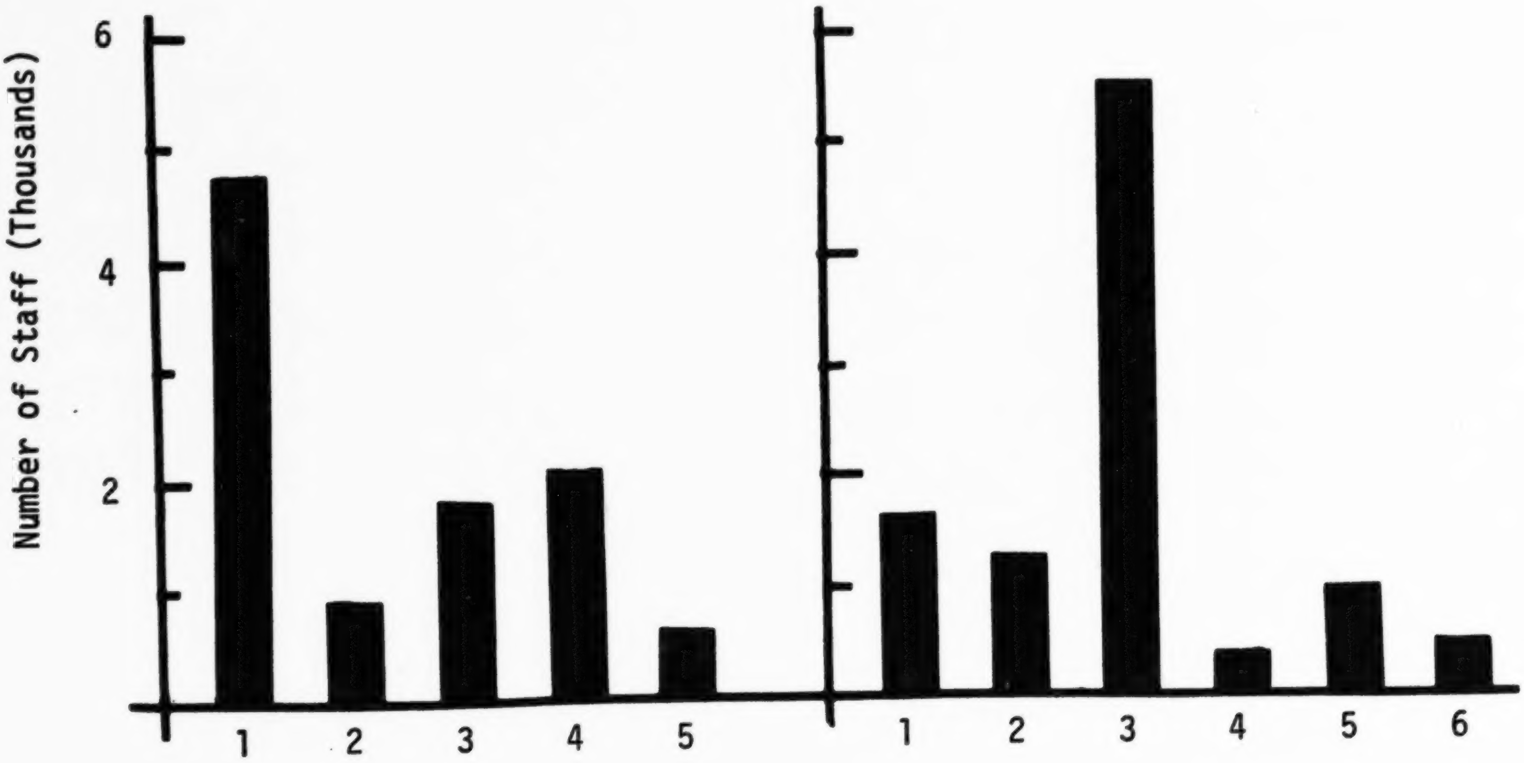
Neither the FY66 application form nor the evaluation reports was a good source of information on the personnel involved in the projects. The application reserved two of its eight pages for reporting numbers of school personnel in the LEA and in the project school and personnel added for the project itself. These were to be recorded in twenty-six activity assignments varying from "Teacher, Pre-school," to "Librarian" and "Social Worker." Within each assignment the number of staff was to be further divided into those involved more and less than half time. This system illustrates the general difficulty in estimating personnel, a problem not peculiar to Title I. Totals alone, because they do not compensate for part-time employees, do not indicate the extent of staff involvement. The "more" and "less than half time" categories used in the Title I form provided indications of the staff density but the breakdowns were still too rough to calculate full-time equivalents. For the projects themselves, only those people to be *paid* with Title I funds were reported. Other faculty members who were to work on projects as part of their regular duties were not reported in the applications. The following series of tables and figures, therefore, are more useful for the trends they suggest than for their statistical accuracy. Figure IV.22 illustrates the "more than half time" staff totals presented in Table IV.13. Table IV.14 presents the totals for activity assignments and comments upon the data. Figure IV.23 and Table IV.15 summarize the proposed "less than half time" staff additions, and Figure IV.24 and Table IV.16 contain information on volunteers.

FIG. IV.22 PAID PROJECT STAFF TO BE ADDED MORE THAN 1/2 TIME
(Application Data)

N = 10,146
No. projects = 915



(a) Project Type



(b) SMSA

(c) State

```
CROSS-TABULATION FOR STAFF ADDED FOR PROJECT                              TABLE NO.  IV.13

 THE TABULATED VARIABLE IS MORE THAN 1/2 TIME TOTAL    UNITS ARE PERSONS          GRAND COUNT      =          915
                                                                                  GRAND MISSES     =          387
 SMSA TYPE ACROSS BY MAJOR PROJECT TYPE DOWN                                      GRAND TOTAL      =     10146.00
                                                                                  GRAND MEAN       =        11.09
                                                                                  GRAND STD. DEV.  =        24.59
 *        1              2              3              4              5           GRAND RANGE      =       227.00
  *
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.55       5 I 0.       0 I 0.66       6 I 1.31      12 I 0.87       8 I 3.39     31 M =        5.97
 1 I     38.00    I       0.     I      31.00   I     104.00   I      12.00   I    185.00  S =       10.63
   I   0     0.37 I   0     0.   I   2     0.31 I   3     1.03 I  12     0.12 I  17    1.82 R =       57.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 2.40      22 I 0.44       4 I 5.46      50 I10.71      98 I 6.99      64 I26.01    238 M =        7.88
 2 I    424.00    I     416.00   I     414.00   I     430.00   I     191.00   I   1875.00  S =       20.11
   I   1     4.18 I   0     4.10 I   9     4.08 I  28     4.24 I  57     1.88 I  95   18.48 R =      227.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.98       9 I 0.11       1 I 1.86      17 I 3.39      31 I 1.97      18 I 8.31     76 M =        9.63
 3 I    338.00    I      28.00   I     118.00   I     189.00   I      59.00   I    732.00  S =       21.58
   I   1     3.33 I   0     0.28 I   6     1.16 I   8     1.86 I  12     0.58 I  27    7.21 R =      177.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.55       5 I 0.         0 I 0.11       1 I 1.64      15 I 3.28      30 I 5.57     51 M =        6.29
 4 I    238.00    I       0.     I       1.00   I      46.00   I      36.00   I    321.00  S =       16.51
   I   0     2.35 I   1     0.   I   3     0.01 I   1     0.45 I  10     0.35 I  15    3.16 R =       98.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 4.92      45 I 0.98       9 I 8.20      75 I11.37     104 I 8.31      76 I33.77    309 M =       15.95
 5 I   2419.00    I     350.00   I     893.00   I    1018.00   I     249.00   I   4929.00  S =       31.55
   I   8    23.84 I   0     3.45 I  12     8.80 I  27    10.03 I  42     2.45 I  89   48.58 R =      222.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.44       4 I 0.22       2 I 0.11       1 I 1.31      12 I 0.33       3 I 2.40     22 M =        2.86
 6 I     33.00    I       8.00   I       1.00   I      16.00   I       5.00   I     63.00  S =        4.86
   I   2     0.33 I   0     0.08 I   4     0.01 I  16     0.16 I   6     0.05 I  28    0.62 R =       23.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.55       5 I 0.11       1 I 0.55       5 I 1.75      16 I 0.66       6 I 3.61     33 M =        8.67
 7 I    187.00    I       2.00   I      52.00   I      39.00   I       6.00   I    286.00  S =       15.49
   I   1     1.84 I   0     0.02 I   1     0.51 I   6     0.38 I   3     0.06 I  11    2.82 R =       76.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.98       9 I 0.22       2 I 1.97      18 I 1.31      12 I 0.87       8 I 5.36     49 M =       16.76
 8 I    472.00    I     113.00   I     152.00   I      56.00   I      28.00   I    821.00  S =       31.11
   I   1     4.65 I   0     1.11 I   2     1.50 I   1     0.55 I   7     0.28 I  11    8.09 R =      174.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
```

CROSS-TABULATION FOR STAFF ADDED FOR PROJECT   TABLE NO.IV.13 (continued)

```
    I--------------I--------------I--------------I--------------I--------------I
    I              I              I              I              I              I
    I 0.22       2 I 0.        0 I 0.        0 I 0.11       1 I 0.11       1 I 0.44       4 M =       8.00
  9 I     17.00    I      0.      I      0.      I     14.00    I      1.00    I     32.00    S =       7.04
    I  0    0.17   I  1   0.      I  2   0.      I  4    0.14   I 17    0.01   I 24    0.32   R =      15.00
    I              I              I              I              I              I
    I--------------I--------------I--------------I--------------I--------------I
    I              I              I              I              I              I
    I 0.77       7 I 0.11       1 I 0.77       7 I 1.64      15 I 0.33       3 I 3.61      33 M =       4.52
 10 I     80.00    I      6.00    I     23.00    I     35.00    I      5.00    I    149.00    S =       5.72
    I  1    0.79   I  0    0.06   I  2    0.23   I  6    0.34   I  5    0.05   I 14    1.47   R =      31.00
    I              I              I              I              I              I
    I--------------I--------------I--------------I--------------I--------------I
    I              I              I              I              I              I
    I 0.44       4 I 0.        0 I 0.11       1 I 0.87       8 I 0.22       2 I 1.64      15 M =       5.40
 11 I     21.00    I      0.      I     40.00    I     16.00    I      4.00    I     81.00    S =       9.76
    I  1    0.21   I  0   0.      I  0    0.39   I  5    0.16   I  9    0.04   I 15    0.80   R =      39.00
    I              I              I              I              I              I
    I--------------I--------------I--------------I--------------I--------------I
    I              I              I              I              I              I
    I 0.11       1 I 0.11       1 I 0.22       2 I 0.33       3 I 0.55       5 I 1.31      12 M =       5.67
 12 I      3.00    I     12.00    I      6.00    I     41.00    I      6.00    I     68.00    S =       7.66
    I  1    0.03   I  0    0.12   I  0    0.06   I  5    0.40   I  2    0.06   I  8    0.67   R =      27.00
    I              I              I              I              I              I
    I--------------I--------------I--------------I--------------I--------------I
    I              I              I              I              I              I
    I 1.31      12 I 0.22       2 I 0.55       5 I 1.31      12 I 0.44       4 I 3.83      35 M =      12.14
 13 I    284.00    I     35.00    I     36.00    I     66.00    I      4.00    I    425.00    S =      18.35
    I  5    2.80   I  0    0.34   I  3    0.35   I  5    0.65   I 16    0.04   I 29    4.19   R =      83.00
    I              I              I              I              I              I
    I--------------I--------------I--------------I--------------I--------------I
    I              I              I              I              I              I
    I 0.33       3 I 0.11       1 I 0.11       1 I 0.11       1 I 0.11       1 I 0.77       7 M =      25.57
 14 I    148.00    I      9.00    I      6.00    I      1.00    I     15.00    I    179.00    S =      30.31
    I  1    1.46   I  0    0.09   I  0    0.06   I  1    0.01   I  2    0.15   I  4    1.76   R =      80.00
    I              I              I              I              I              I
    I--------------I--------------I--------------I--------------I--------------I

     14.54     133   2.62      24  20.66     189  37.16     340  25.03     229      100.00     915
         4702.00          979.00        1773.00        2071.00         621.00         10146.00
       23   46.34      2    9.65    46   17.47   116   20.41   200    6.12         387  100.00

    M =       35.35 M =       40.79 M =        9.38 M =        6.09 M =        2.71    M =       11.09
    S =       46.48 S =       55.96 S =       11.95 S =        9.88 S =        5.02    S =       24.59
    R =      222.00 R =      226.00 R =       95.00 R =      115.00 R =       56.00    R =      227.00
```

TABLE IV.14
PAID STAFF TO BE ADDED AS STAFF MEMBERS FOR THE PROJECTS, MORE THAN 1/2 TIME
(Application Data)

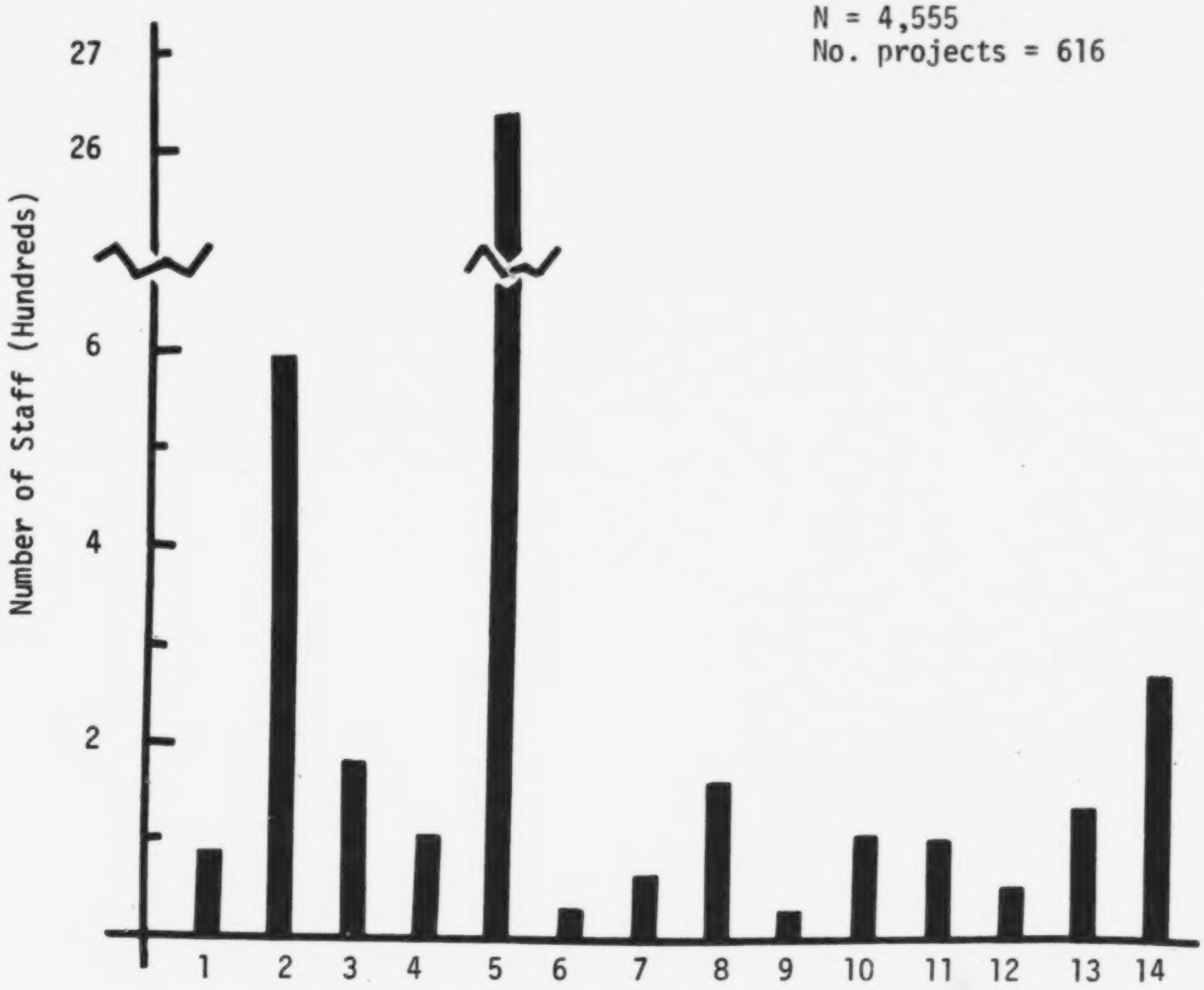
Position		No. Staff Added	No. Projects	Comments
1. Teacher-pre-school		315	30	241 in Mass.; 311 in gen. remedial and pre-school
2. "	Kindergarten	71	26	None in N.H. pre-school, gen. rem., reading
3. "	Rem. reading & language	1585	398	817 in Mass., reading & gen. rem.
4. "	Speech correctionist	144	80	96 in Mass., mostly gen. rem. & reading
5. "	Emotionally disturbed	14	5	7 in Conn., none in R.I. & Vt., gen. rem. & spec. classes
6. "	Physically handicapped	8	3	6 in N.H., reading
7. "	Mentally retarded	64	27	22 each in Conn. & Me., gen. rem. spec. classes
8. "	Socially maladjusted	18	6	7 in Conn., 9 in R.I. gen. rem., spec. classes
9. Other teachers		3361	401	1770 in Mass. 1867 in gen. rem.
10. Materials & resources		39	2	38 in Mass. SMSA 2, reading
11. Teacher Aid		2418	285	1355 in Mass., gen. rem., reading, instr. services, pre-school
12. Librarian		110	56	Mostly in Conn. & Mass., gen. rem, reading, library
13. Supervision		256	107	114 in Mass., 85 in Conn., most projects

TABLE IV.14
PAID STAFF, MORE THAN 1/2 TIME (continued)

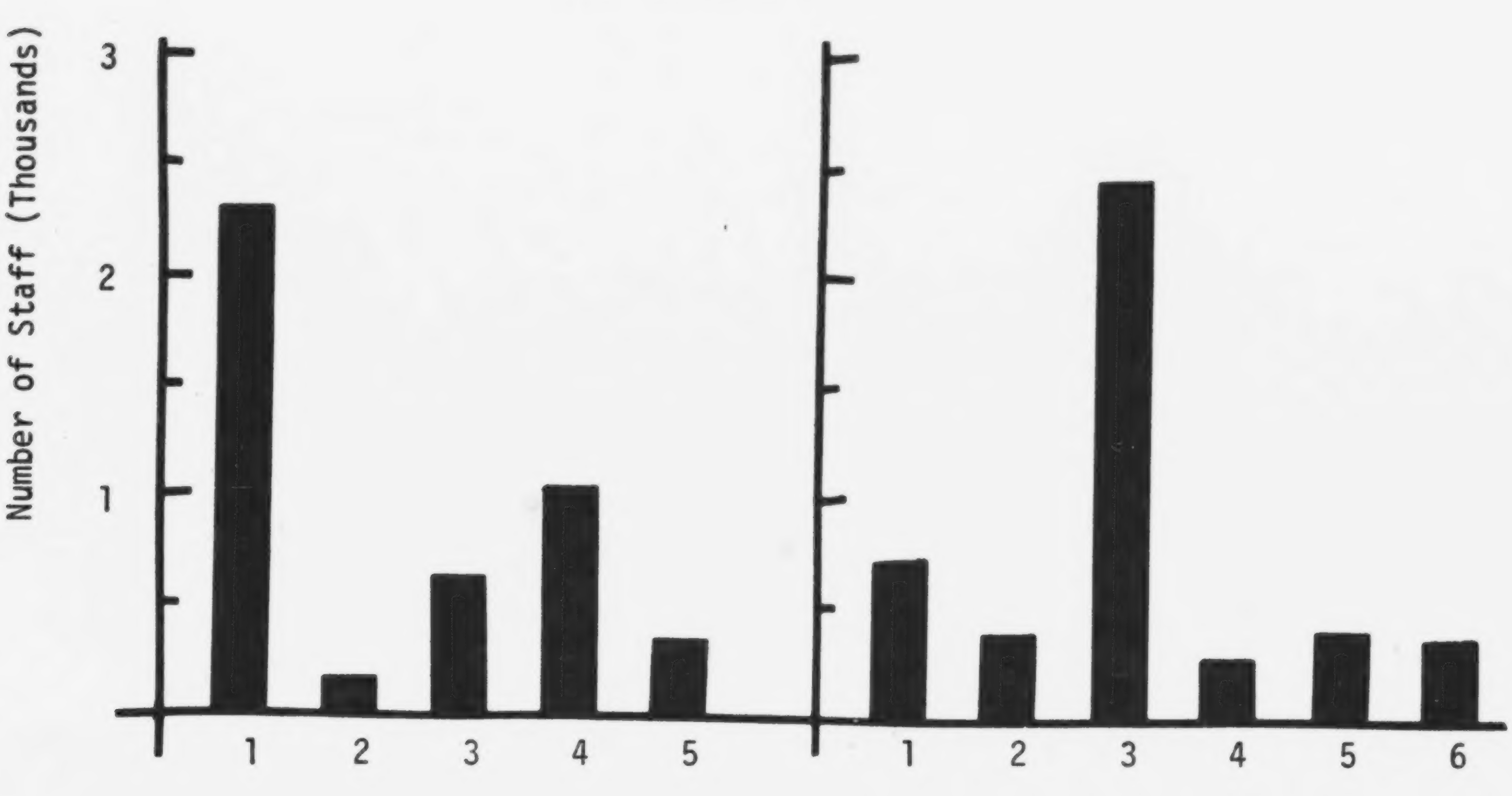
Position	No. Staff Added	No. Projects	Comments
14. Administration	297	211	147 in Mass., gen. rem., others scattered
15. Counselor	286	126	195 in Mass., gen. rem. & guidance
16. Psychologist	68	46	Mostly Me., Mass., R.I., reading, gen. rem., guidance
17. Testing assignment	67	32	46 in Mass., gen. rem., guidance, pre-school, reading
18. Social Worker	138	66	70 in Mass., gen. rem., guidance
19. Attendance assignment	6	6	4 in Mass.
20. Nurse	168	121	85 in Mass., gen. rem., pre-school, reading, lang.
21. Physician	17	13	12 in Mass., mostly gen. rem., pre-school, guidance
22. Dentist	2	2	Mass. SMSA 1, gen. rem., guidance
23. Dental Hygenist	11	11	6 in Mass., 3 in Vt.
24. Other professional	113	32	81 in Mass., none in N.H. or Vt., scattered project
25. Other Non-professional	566	204	311 in Mass., mostly gen. rem. & reading
26. Audio-Visual	4	4	2 in Conn., 1 in Me., 1 in R.I., gen. rem., lang., in-service
Total paid staff added more than 1/2 time.	10,146	915 (unduplicated count)	

FIG. IV.23 PAID PROJECT STAFF TO BE ADDED LESS THAN 1/2 TIME
(Application Data)

N = 4,555
No. projects = 616



(a) Project Type



(b) SMSA

(c) State

TABLE IV.15

PAID STAFF TO BE ADDED AS STAFF MEMBERS FOR THE PROJECTS, LESS THAN 1/2 TIME
(Application Data)

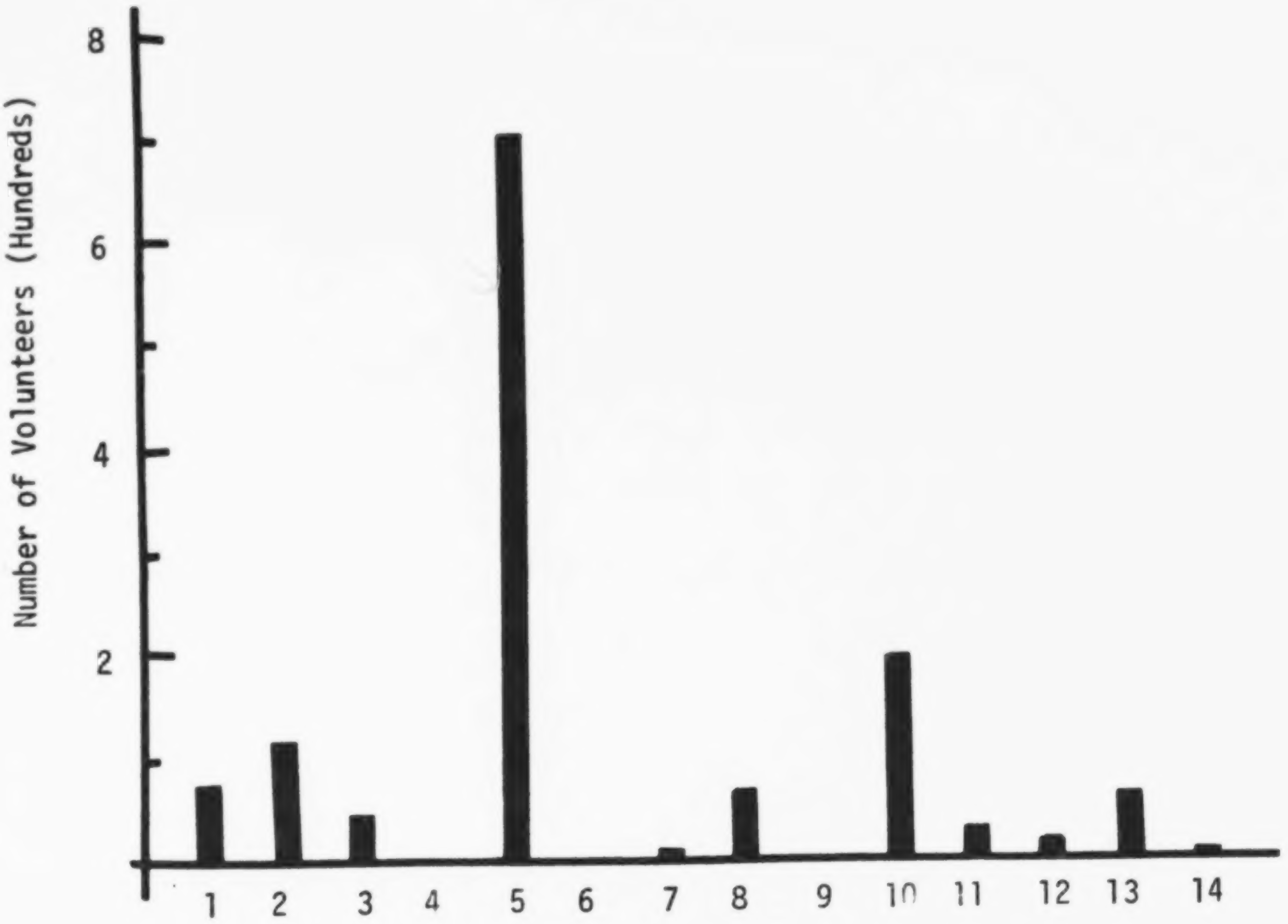
Position	No. Staff Added	No. Projects	Comments
1. Teacher-pre-school	32	13	20 in Mass., gen. rem.
2. " Kindergarten	21	11	12 in Vt., mostly gen. rem. & pre-school
3. " Rem. reading & language	732	137	392 in Mass., mostly gen. rem. & reading
4. " Speech Correctionist	52	30	32 in Mass., mostly reading & lang. arts, gen. rem.
5. " Emotionally disturbed	2	2	Conn. reading & spec. classes
6. " Physically handicapped	0		
7. " Mentally retarded	15	3	Conn. SMSA 1, spec. classes, gen. rem.
8. " Socially maladjusted	1	1	Conn. SMSA 1, spec. classes
9. Other teachers	1464	185	773 in Mass., mostly gen. rem. & in-serv.
10. Materials & resources	7	1	Mass. SMSA 2, reading
11. Teacher Aid	403	79	245 in Mass., mostly gen. rem.
12. Librarian	55	25	25 in Conn., in expected projects
13. Supervision	241	81	137 in Mass., gen. rem., reading
14. Administration	191	127	87 in Mass., mostly gen. rem., reading & in-service
15. Counselor	77	43	31 in R.I., mostly gen. rem. & reading

TABLE IV.15
PAID STAFF, LESS THAN 1/2 TIME (continued)

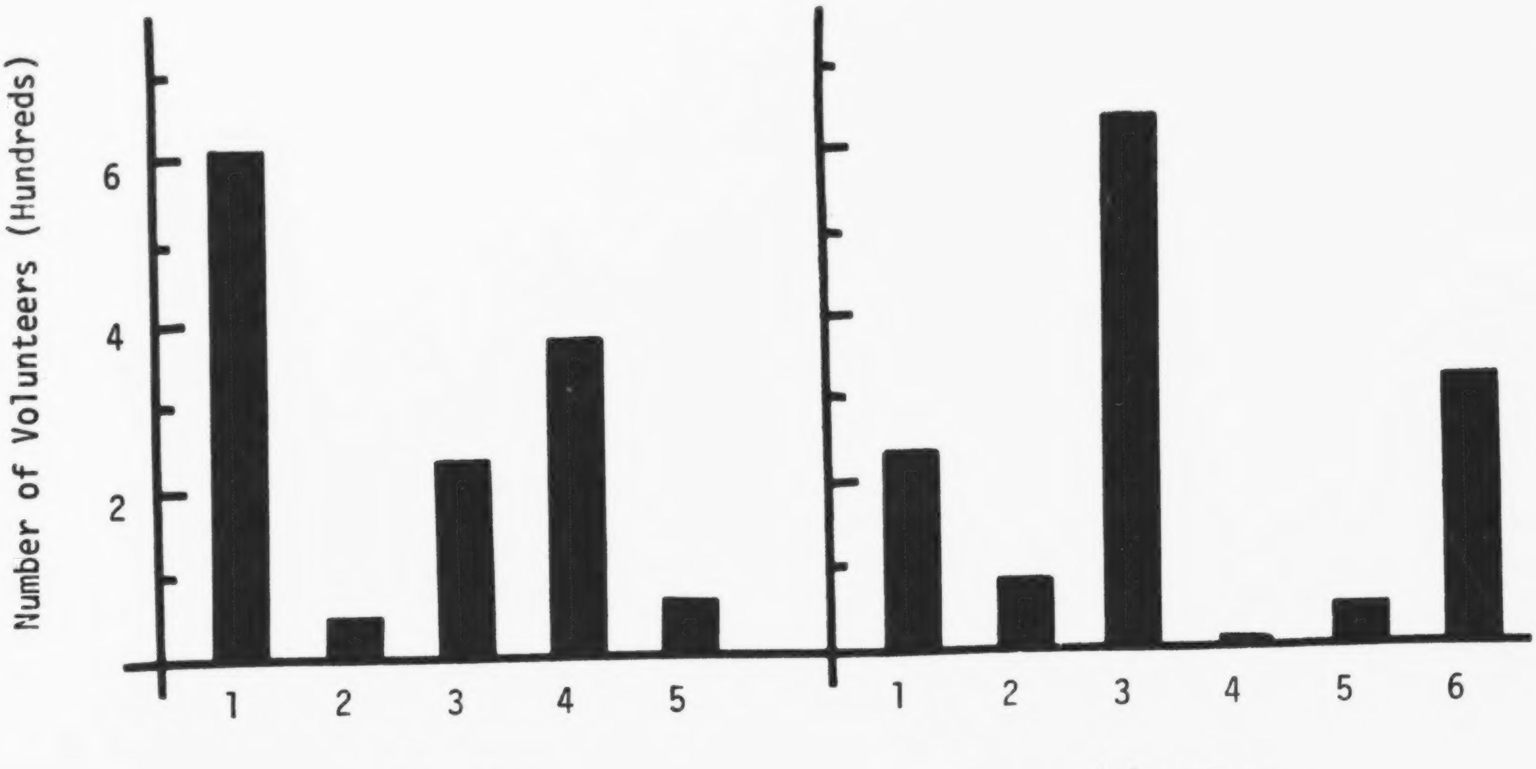
Position	No. Staff Added	No. Projects	Comments
16. Psychologist	85	72	33 in Mass., mostly gen. rem. & reading
17. Testing assignment	38	32	20 in Mass., none in N.H., mostly gen. rem. & reading
18. Social Worker	81	38	57 in Mass., none in R.I., mostly gen. rem. & pre-school
19. Attendance assignment	5	4	3 in Me., 1 in Mass., 1 in N.H., reading & language
20. Nurse	111	58	70 in Mass., mostly non-acad. services
21. Physician	123	82	55 in Mass., projects scattered
22. Dentist	48	33	25 in Mass., mostly gen. rem., non-acad., pre-school
23. Dental Hygenist	16	15	9 in Mass., 5 in VT. gen. rem., & non-acad.
24. Other professional	271	33	250 in Mass., 224 in gen. rem., 20 in-serv.
25. Other non-professional	475	186	Mostly in Me. & Mass. all proj. except in-service
26. Audio-Visual	5	4	4 in Conn., 1 in Mass., reading, pre-school & in-service
Total staff added (less than 1/2 time)	4555	616 (unduplicated count)	

FIG. IV.24 VOLUNTEERS TO BE ADDED AS PROJECT STAFF
(Application Data)

N = 1,334
No. projects = 96



(a) Project Type



(b) SMSA

(c) State

TABLE IV.16

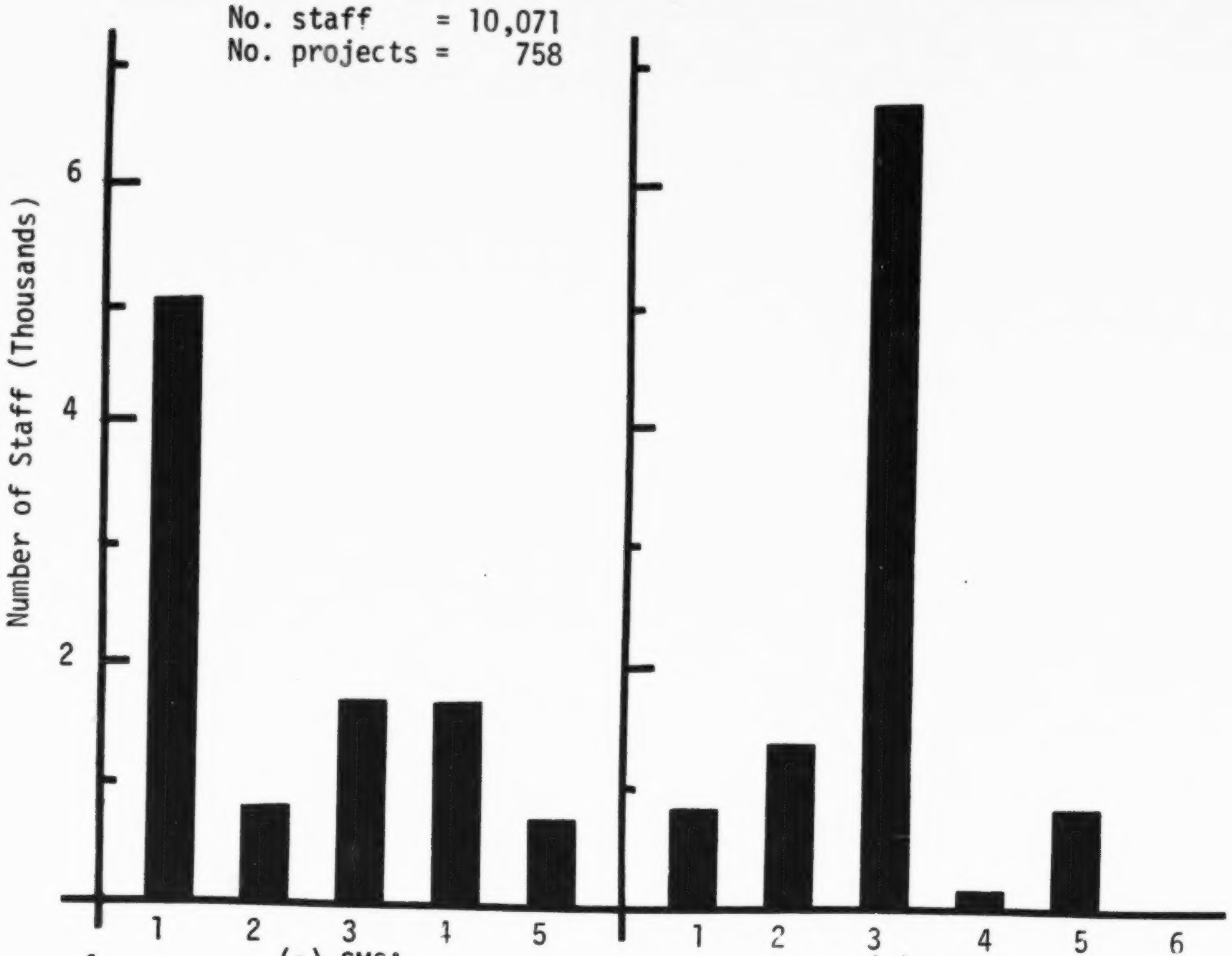
UNPAID VOLUNTEERS TO BE ADDED AS STAFF MEMBERS FOR THE PROJECTS
(Application Data)

Position	No. Staff Added	No. Projects	Comments
1. Teacher-pre-school	45	3	40 in one Mass., gen. rem. project
2. " kindergarten	10	3	All Vt. 5 acad. instr. 5 gen. rem.
3. " remedial reading	24	11	None in N.H. or R.I. All in expected projects
4. " speech correctionist	6	1	Vt., gen.rem. proj.
5. " emotionally disturbed	0		
6. " physically handicapped	0		
7. " socially maladjusted	0		
8. " mentally retarded	0		
9. Other teachers	308	21	169 Vt., gen. rem.,guid., acad. proj.
10. Materials and resources	4	1	Mass., SMSA 2, reading
11. Teacher Aid	561	31	429 Mass. none in N.H. or R.I., mostly gen. rem.
12. Librarian	76	8	None in Me. or N.H., all in expected projects
13. Supervision assignment	91	5	80 in one Conn. SMSA 1, guidance project
14. Administration	50	20	None in N.H. Most in acad. project
15. Counselor	25	1	All Me., gen. rem.
16. Psychologist	1	1	Mass. SMSA 1, gen. rem.
17. Testing assignment	0		
18. Social worker	8	4	6 Mass., mostly gen. rem.
19. Attendance assignment	0		

TABLE IV.16
VOLUNTEERS (continued)

Position	No. Staff Added	No. Projects	Comments
20. Nurse	27	4	22 Vt., gen. rem. & non-academic
21. Physician	8	6	4 Me., 3 Mass., 1 Vt.; mostly gen. rem.
22. Dentist	6	3	3 Me., 3 Mass.; 2 pre-school
23. Dental Hygenist	1	1	Mass. SMSA 1; gen. rem.
24. Other Professional	42	5	Mostly Mass., R.I. read., gen. rem., pre-school, in-serv.
25. Other Non-professional	40	7	None in Conn., 20 Mass.; gen. rem., non-academic
26. Audio-visual	1	1	Mass. SMSA 1, gen. rem.
All Volunteers	1334	96 (unduplicated count)	

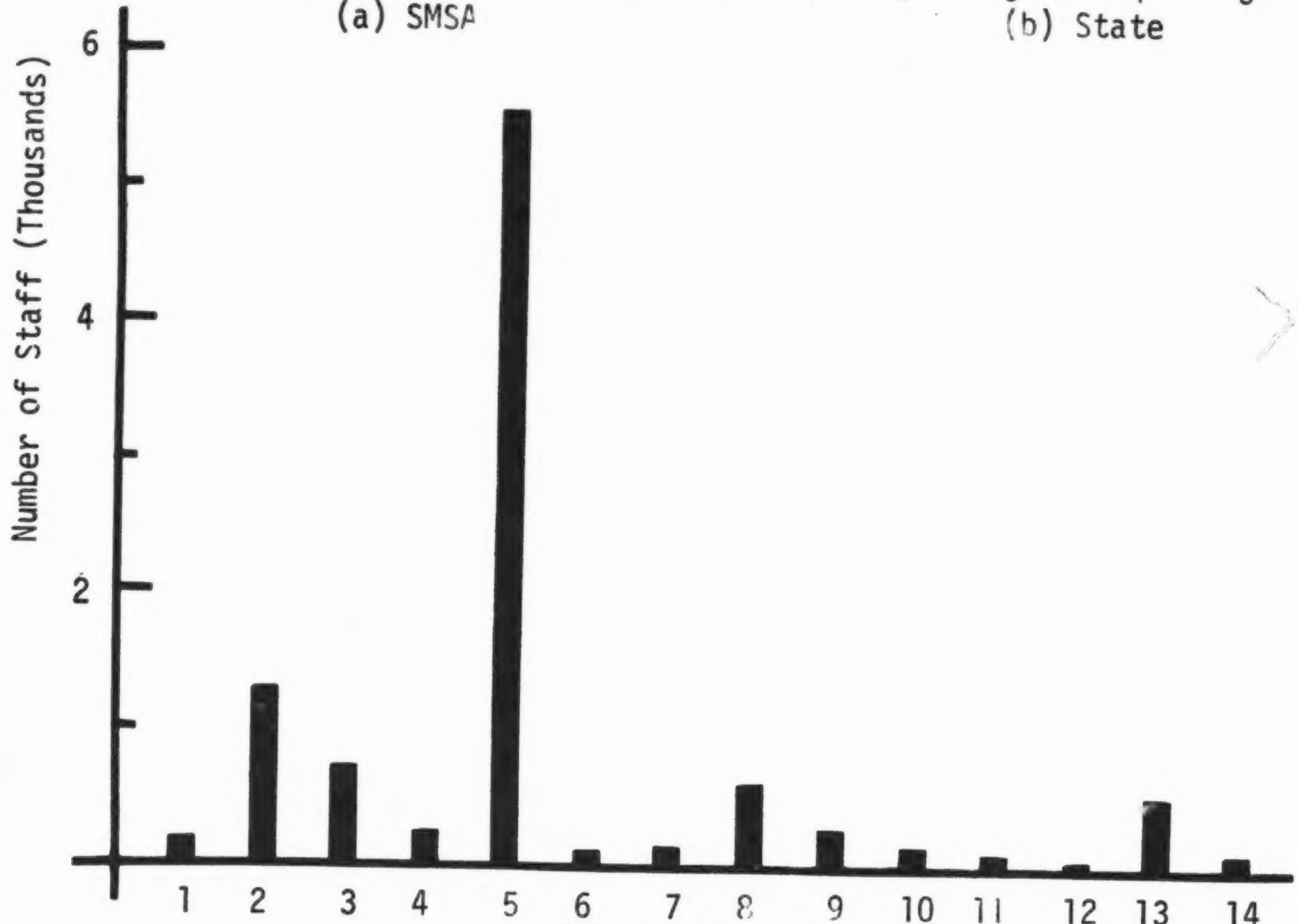
FIG. IV.25 TOTAL PROJECT STAFF (Evaluation Data)



No. staff = 10,071
No. projects = 758

(a) SMSA

(b) State



(c) Project Type

```
CROSS-TABULATION FOR TITLE I EVALUATIONS DATA                          TABLE NO. IV.17

  THE TABULATED VARIABLE IS TOTAL STAFF                    UNITS ARE PERSONS       GRAND COUNT     =          758
                                                                                   GRAND MISSES    =          548
  SMSA TYPE ACROSS BY STATE DOWN                                                   GRAND TOTAL     =     10071.00
                                                                                   GRAND MEAN      =        13.29
 *       1              2              3              4              5             GRAND STD. DEV. =        35.25
  *                                                                                GRAND RANGE     =       759.00
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  1.32     10 I  0.40      3 I  3.17     24 I  1.72     13 I  0.92      7 I  7.52       57 M =        14.49
 1 I    440.00    I     13.00    I    153.00    I    191.00    I     29.00    I      826.00  S =        33.88
   I  32     4.37 I  2     0.13  I  34     1.52 I  33     1.90 I  5      0.29 I  106    8.20 R =       223.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  2.37     18 I  0.        0 I  1.32     10 I 19.26    146 I 20.32    154 I 43.27      328 M =         4.34
 2 I    239.00    I     0.       I     56.00    I    688.00    I    442.00    I     1425.00  S =         7.59
   I  2      2.37 I  0      0.   I  12     0.56 I  49     6.83 I  68     4.39 I  131   14.15 R =        71.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  7.12     54 I  2.24     17 I 13.98    106 I  7.52     57 I  3.43     26 I 34.30      260 M =        25.88
 3 I   3951.00    I    733.00    I   1266.00    I    602.00    I    177.00    I     6729.00  S =        60.55
   I  22    39.23 I  1      7.28 I  12    12.57 I  7      5.98 I  0      1.76 I  42    66.82 R =       759.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  0.13      1 I  0.        0 I  0.        0 I  4.09     31 I  4.09     31 I  8.31       63 M =         3.03
 4 I      2.00    I     0.       I     0.       I    126.00    I     63.00    I      191.00  S =         3.78
   I  4      0.02 I  0      0.   I  3      0.   I  41     1.25 I  54     0.63 I  102    1.90 R =        22.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  1.32     10 I  0.26      2 I  2.77     21 I  1.32     10 I  0.53      4 I  6.20       47 M =        19.09
 5 I    418.00    I     86.00    I    249.00    I    111.00    I     33.00    I      897.00  S =        33.56
   I  3      4.15 I  1      0.85 I  13     2.47 I  3      1.10 I  0      0.33 I  20     8.91 R =       19[illegible].00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  0.        0 I  0.        0 I  0.        0 I  0.13      1 I  0.26      2 I  0.40        3 M =         1.00
 6 I     0.       I     0.       I     0.       I      1.00    I      2.00    I        3.00  S =         0.
   I  0      0.   I  0      0.   I  0      0.   I  65     0.01 I  78     0.02 I  147    0.03 R =         0.
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I

    12.27     93   2.90     22   21.24    161   34.04    258   29.55    224      100.00     758
       5050.00         832.00        1724.00        1719.00         746.00           10071.00
     63    50.14     4     8.26     74   17.12    202   17.07    205    7.41         548  100.00

  M =       54.30 M =      37.82 M =      10.71 M =       6.66 M =       3.33      M =       13.29
  S =       96.87 S =      41.71 S =      10.33 S =      10.40 S =       5.74      S =       35.25
  R =      759.00 R =     150.00 R =      64.00 R =     113.00 R =      65.00      R =      759.00
```

Note: 548 of the 1306 evaluation reports failed to include information about the number of staff actually involved in the project.

```
CROSS-TABULATION FOR TITLE I EVALUATIONS DATA                              TABLE NO. IV.18

  THE TABULATED VARIABLE IS TOTAL STAFF                   UNITS ARE PERSONS        GRAND COUNT      =          758
                                                                                   GRAND MISSES     =          548
  SMSA TYPE ACROSS BY MAJOR PROJECT TYPE DOWN                                      GRAND TOTAL      =     10071.00
                                                                                   GRAND MEAN       =        13.29
 *         1             2             3             4             5              GRAND STD. DEV. =        39.25
  *                                                                                GRAND RANGE      =       759.00
   I-------------I-------------I-------------I-------------I-------------I
   I             I             I             I             I             I
   I 0.40      3 I 0.        0 I 0.53      4 I 1.45     11 I 1.45     11 I 3.83      29 M =      5.21
 1 I     36.00   I      0.     I     29.00   I     65.00   I     21.00   I     151.00  S =      8.12
   I   2    0.36 I   0      0. I   4    0.29 I   5    0.65 I   9    0.21 I  20     1.50 R =     35.00
   I             I             I             I             I             I
   I-------------I-------------I-------------I-------------I-------------I
   I             I             I             I             I             I
   I 1.58     12 I 0.40      3 I 5.41     41 I 9.76     74 I 8.58     65 I25.73     195 M =      7.17
 2 I    230.00   I    278.00   I    385.00   I    331.00   I    174.00   I    1398.00  S =     15.30
   I  11    2.28 I   1    2.76 I  18    3.82 I  53    3.29 I  56    1.73 I 139    13.88 R =    152.00
   I             I             I             I             I             I
   I-------------I-------------I-------------I-------------I-------------I
   I             I             I             I             I             I
   I 0.92      7 I 0.13      1 I 2.37     18 I 3.17     24 I 1.85     14 I 8.44      64 M =     11.22
 3 I    315.00   I     26.00   I    156.00   I    148.00   I     73.00   I     718.00  S =     27.10
   I   3    3.13 I   0    0.26 I   5    1.55 I  15    1.47 I  16    0.72 I  39     7.13 R =    216.00
   I             I             I             I             I             I
   I-------------I-------------I-------------I-------------I-------------I
   I             I             I             I             I             I
   I 0.26      2 I 0.13      1 I 0.        0 I 1.06      8 I 3.17     24 I 4.62      35 M =      7.77
 4 I    186.00   I      4.00   I      0.     I     48.00   I     34.00   I     272.00  S =     21.77
   I   3    1.85 I   0    0.04 I   4      0. I   9    0.48 I  16    0.34 I  32     2.70 R =    113.00
   I             I             I             I             I             I
   I-------------I-------------I-------------I-------------I-------------I
   I             I             I             I             I             I
   I 5.01     38 I 1.06      8 I 8.31     63 I 9.89     75 I 8.58     65 I32.85     249 M =     22.10
 5 I   3174.00   I    349.00   I    821.00   I    889.00   I    271.00   I    5504.00  S =     59.86
   I  15   31.52 I   1    3.47 I  24    8.15 I  56    8.83 I  53    2.69 I 149    54.65 R =    759.00
   I             I             I             I             I             I
   I-------------I-------------I-------------I-------------I-------------I
   I             I             I             I             I             I
   I 0.66      5 I 0.13      1 I 0.26      2 I 2.51     19 I 0.92      7 I 4.49      34 M =      2.97
 6 I     48.00   I      3.00   I      6.00   I     31.00   I     13.00   I     101.00  S =      4.46
   I   1    0.48 I   1    0.03 I   3    0.06 I  10    0.31 I   2    0.13 I  17     1.00 R =     23.00
   I             I             I             I             I             I
   I-------------I-------------I-------------I-------------I-------------I
   I             I             I             I             I             I
   I 0.40      3 I 0.13      1 I 0.53      4 I 0.79      6 I 0.26      2 I 2.11      16 M =      7.63
 7 I     61.00   I      6.00   I     22.00   I     26.00   I      7.00   I     122.00  S =      6.68
   I   3    0.61 I   0    0.06 I   2    0.22 I  16    0.26 I   7    0.07 I  28     1.21 R =     31.00
   I             I             I             I             I             I
   I-------------I-------------I-------------I-------------I-------------I
   I             I             I             I             I             I
   I 0.53      4 I 0.26      2 I 1.98     15 I 1.19      9 I 0.92      7 I 4.88      37 M =     16.32
 8 I    229.00   I    109.00   I    172.00   I     36.00   I     58.00   I     604.00  S =     25.19
   I   6    2.27 I   0    1.08 I   5    1.71 I   4    0.36 I   8    0.58 I  23     6.00 R =     99.00
   I             I             I             I             I             I
   I-------------I-------------I-------------I-------------I-------------I
```

CROSS-TABULATICN FCR TITLE I EVALUATICNS CATA TABLE NC.IV.18 (continued)

```
    I---------------I---------------I---------------I---------------I---------------I
    I               I               I               I               I               I
    I C.13        1 I C.          0 I 0.26        2 I C.26        2 I C.53        4 I  1.19        9 M =      30.67
 9  I      224.00   I       C.      I       25.CC   I       2C.CC   I        7.CC   I       276.CC  S =      68.73
    I   1      2.22 I   1     C.    I  C      0.25  I  3      C.2C  I  14     C.C7  I  19     2.74 R =     223.CC
    I               I               I               I               I               I
    I---------------I---------------I---------------I---------------I---------------I
    I               I               I               I               I               I
    I C.66        5 I C.13        1 I 0.92        7 I 1.58       12 I C.53        4 I  3.83       29 M =       5.C3
 1C I       33.C0   I        7.CC   I       49.00   I       39.0C   I       18.CC   I       146.CC  S =       4.73
    I  3      0.33  I  C      C.C7  I  2      0.49  I  9      C.39  I  4      C.18  I  18     1.45 R =      2C.CC
    I               I               I               I               I               I
    I---------------I---------------I---------------I---------------I---------------I
    I               I               I               I               I               I
    I C.4C        3 I C.          C I 0.13        1 I C.66        5 I C.13        1 I  1.32       1C M =      1C.1C
 11 I       70.C0   I       C.      I       21.00   I        8.CC   I        2.CC   I       1C1.CC  S =      15.92
    I  2      C.7C  I  0      C.    I  C      0.21  I  8      C.C8  I  1C     C.C2  I  2C     1.CC R =      53.CC
    I               I               I               I               I               I
    I---------------I---------------I---------------I---------------I---------------I
    I               I               I               I               I               I
    I C.13        1 I C.13        1 I C.          C I C.66        5 I C.66        5 I  1.58       12 M =       3.83
 12 I        8.C0   I       1C.CC   I       0.      I       10.0C   I       18.CC   I        46.CC  S =       2.94
    I  1      C.08  I  0      C.1C  I  2      C.    I  3      C.1C  I  2      C.18  I  8      C.46 R =       9.CC
    I               I               I               I               I               I
    I---------------I---------------I---------------I---------------I---------------I
    I               I               I               I               I               I
    I C.92        7 I C.26        2 I 0.4C        3 I C.92        7 I 1.58       12 I  4.C9       31 M =      17.35
 13 I      382.00   I       34.0C   I       31.C0   I       54.CC   I       37.CC   I       538.CC  S =      4C.63
    I  1C     3.79  I  0      C.34  I  5      0.31  I  1C     C.54  I  8      C.37  I  33     5.34 R =     193.CC
    I               I               I               I               I               I
    I---------------I---------------I---------------I---------------I---------------I
    I               I               I               I               I               I
    I C.26        2 I C.13        1 I C.13        1 I C.13        1 I C.4C        3 I  1.C6        8 M =      11.75
 14 I       54.CC   I        6.CC   I        7.C0   I       14.CC   I       13.CC   I        94.CC  S =      12.36
    I  2      0.54  I  C      C.C6  I  C      C.C7  I  1      C.14  I  C      C.13  I  3      C.93 R =      42.CC
    I               I               I               I               I               I
    I---------------I---------------I---------------I---------------I---------------I

      12.27      93   2.9C       22  21.24     161  34.C4     258  29.55     224       1CC.CC     758
          5C5C.C0          832.CC        1724.CC        1719.CC         746.CC           1CC71.CC
       63   5C.14       4    8.26     74   17.12    2C2   17.C7    2C5    7.41           548  1CC.CC

     M =      54.3C M =     37.82 M =      1C.71 M =       6.66 M =      3.33       M =     13.29
     S =      96.87 S =     41.71 S =      1C.33 S =      1C.4C S =      5.74       S =     39.25
     R =     759.CC R =     15C.CC R =      64.CC R =     113.CC R =     65.CC       R =    759.CC
```

· Note: 548 of the 1306 evaluation reports failed to include information about the number of staff actually involved in the project.

Major Variable Codes

Code	Major Project Type
1	Academic Instruction
2	Reading
3	Language Arts
4	Instructional Services
5	General Remedial
6	Vocational
7	Special Classes
8	School Readiness
9	Materials and Equipment
10	Guidance and Psychological Services
11	Non-Academic Services to Pupils
12	Library
13	Non-Academic Enrichment Activities
14	In-Service Training

Code	State
1	Connecticut
2	Maine
3	Massachusetts
4	New Hampshire
5	Rhode Island
6	Vermont

Code	SMSA
1	Metropolitan - core city
2	Metropolitan - more than 50,000
3	Metropolitan - less than 50,000
4	Non-Metropolitan - more than 2,500
5	Non-Metropolitan - less than 2,500

The evaluation reports furnish little on the numbers or types of personnel that finally did participate in the projects. Only three of the six report forms requested the size of the project staff; even in these states, it was frequently not reported. For the other three states, the information was sometimes included in narrative descriptions of project activities. Unless an LEA chose to amplify its response, there was no indication of what fields its personnel were in, let alone how much of their time was spent on Title I activities. Figure IV.25 summarizes the displays in Table IV.17 and IV.18. Because the structure of the state evaluation forms themselves largely determined how many people were reported, even the trends in these data are unreliable.

IV.5 PROBLEMS IN IMPLEMENTING PROJECTS

All six of the state-designed evaluation reports request that the LEAs report either by individual projects or collectively for all their Title I activities, the major difficulties they encountered in carrying out project plans. The item was cast open-endedly. Generally, the request followed the wording of the USOE report form for the states:

> "What problems have been experienced in developing and implementing public and non-public school cooperative projects?"

A list of eight major problem areas was designed and within each group, Table IV.19, column 2, presents a frequency count of the number of times each type of problem was reported. For this particular count, when a problem was vaguely stated (i.e. "personnel shortage" or "administrative difficulties") it was credited to the appropriate major area but not to the one of its sub-divisions. Thus, in this list, the figures for the major problem areas are not the sum of its sub-divisions, but rather the number of times that the general problem was reported without amplification. The entire count is not unduplicated; any project could have reported from one to 35 different problems. Column 3 presents the total number of times a problem was reported in each class; here the sub-division figures have been added to the number of more general responses-so that the major area totals are higher. Facilities problems were reported most frequently, followed closely by "Personnel." Somewhat lower were "Timing" and "Operations" problems.

A cross-tally was made of the frequency with which any combination of two major problem areas were reported by the same project. The results

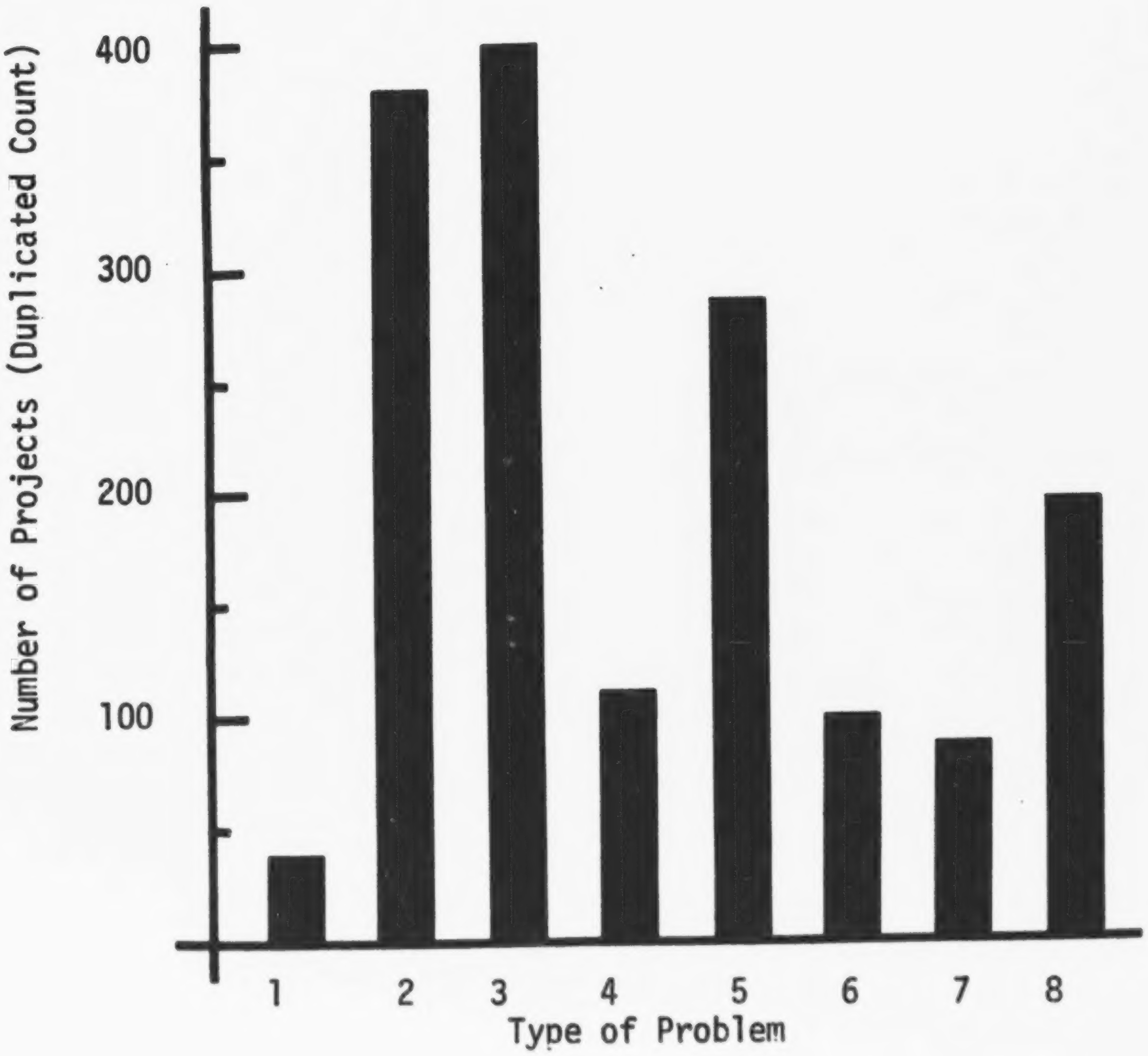
TABLE IV.19 FREQUENCY OF PROBLEMS REPORTED

Col. 1	Col. 2	Col. 3
PROBLEM	FREQUENCY	MAJOR PROBLEM AREA TOTAL
1. SERVICES	3	37
Guidance	13	
Health	20	
Library	1	
2. FACILITIES	34	465
Library	4	
Classroom space	115	
Materials	187	
Equipment	71	
Transportation	52	
Other	2	
3. PERSONNEL	131	459
Administrative	61	
Teaching staff	204	
Teacher aides	19	
Clerical assistance	44	
4. FINANCIAL	49	113
Title I funds	19	
Late receipt of Title I funds	43	
Local funds	2	
5. TIME	95	316
for planning	70	
for executing	68	
Late approval of project	62	
For in-service training	21	
5. COOPERATION	7	103
Local	30	
Parent	44	
Private school	15	
Community action programs and other Federal programs	7	
7. STUDENTS	1	94
Identification of "educationally disadvantaged"	46	
Over enrollment	20	
Under enrollment	4	
Irregular attendance	23	
8. OPERATION	3	223
Scheduling	57	
Coordination of project and regular activities	35	
In-service training	7	
Local, state, federal communication	39	
Evaluation guideline	19	
Standard procedures (concrete plans)	20	
Filling out necessary forms	43	

TABLE IV.20 CROSS-TALLY OF PROBLEM COMBINATIONS

MAJOR PROBLEM AREA	1	2	3	4	5	6	7
2	14						
3	22	218					
4	4	42	56				
5	10	141	140	24			
6	7	53	43	11	19		
7	5	30	42	9	27	10	
8	7	120	90	35	69	37	19

FIG. IV.26 TYPES OF PROBLEMS (Evaluation Data)



TYPES OF PROBLEMS

1. Services: library, health, guidance
2. Facilities: library, classroom space, materials, transportation
3. Personnel: administrative, teachers, teacher aides, clerical
4. Financial: Title I funds, local funds
5. Time: for planning, training, executing
6. Cooperation: local, parent, private school, other federal programs
7. Students: identification, enrollment, attendance
8. Operation: scheduling, coordination, training, communication, evaluation, paperwork

are shown in Table IV.20 . Of the fifteen most common combinations, only one involved a problem area that was not one of the four that were already individually most frequent. This was a combination of "Personnel" (#3) and "Financial" (#4) problems and ranked eighth (8th) in popularity. Within the four most frequent major areas, and particularly in "Facilities" (#2) and "Personnel" (#3), often projects reported more than one problem. The sub-division options were closely related and projects having one of the problems were not unlikely to have another. A report of problems in obtaining equipment and materials was counted twice in the "Facilities" category total; similarly difficulties in scheduling and coordinating project activities would count as two in the "Operations" group. Figure IV.26 organizes the information differently. Instead of reporting problem occurrances, it counts the number of projects themselves that reported any problem, regardless of how many, in each major area. These data indicate that more projects had problems in "Personnel," generally in securing project staff, than in any other area, "Facilities" were the second most frequent, "Timing" and "Operations" third and fourth. Within each of the three major variables, SMSA, state and project type, the pattern generally remained the same as the overall pattern. "Personnel" and "Facilities" difficulties alternated between first and second in frequency.

One of the most critical personnel problems reported by the LEAs concerning the operation of FY66 projects was that of locating appropriate personnel to staff projects. Specialist in such fields as remedial reading, guidance, and the education of low achievers, required by many projects, were particularly scarce. Unfortunately, there is no information to measure how the anticipation of staff shortages may have prevented LEAs from realistically proposing certain types of project activities in their initial applications, and the application and evaluation forms themselves do not permit adequate comparison of the types of professional personnel that LEAs did propose to add for Title I projects to those they were actually able to hire. Yet, it is evident from the narrative comments in evaluation reports alone that staffing was the major problem in implementing Title I plans.

During the first year of Title I, the problem was compounded by late appropriation of Title I funds. Most projects were not funded before January, 1967, and by that time LEAs were often unable to fill project staffing requirements for the remainder of the school year. Difficulties seemed to be no less acute for summer projects. Many LEAs were forced to assign existing staff members to Title I activities for which they had hoped to employ new specialists.

While part of the problem may be alleviated as LEAs become accustomed to planning ahead for Title I funds, the location, training, and deployment of certain types of professional educators may not always be feasibly carried out at the local school district level. Title I project staffing appears to be an area in which greater leadership and coordination from the state departments, and perhaps the USOE, could be of assistance. One approach to manpower development might be for the state departments to act as a clearinghouse to facilitate communication between teacher training institutions within the state and public schools and to coordinate training programs with the needs of the LEAs. Such a service could also acquaint both pre-service and trained staff with available positions and LEAs with available personnel. One possibility for funding such a staff training and deployment program is the *Education Professions Act of 1967.* This legislation requires that each state education agency submit a state plan in order to participate. Those states that consider Title I staffing a top priority might devise a program for coordinating and training personnel for teaching the educationally deprived child.

Although data on FY66 projects are insufficient to permit conclusions about the state of in-service training programs provided by LEAs for their staff involved in Title I projects, there are indirect indications that this area of staff development may also be weak. As section IV.3.3 indicates, 50% of the projects planned some form of in-service training specifically for the teachers involved in project activities. Only 19% of the projects actually budgeted Title I funds for such training. Yet, the application form and guidelines did not define what constituted in-service training, so no distinction is made between a one session orientation program and an intensive continuing training course. The high frequency of problems in obtaining new staff suggests that provision of adequate in-service programs may also have been difficult. If specialists to teach Title I project children were difficult to find, they may also have been unavailable to conduct staff training programs. In-service training programs in subject matter and methodology for teaching the Title I child are undoubtedly critical, although there is not enough information available in the FY66 Title I documents to study the extent of current in-service activities or the relationship between staff training and project success. In this area of staff development, too, the state departments of education could assist the LEAs by disseminating suggestions on the conduct and content of in-service training courses, by informing the schools of relevant training programs offered in teacher training institutions, colleges, and universities, and by perhaps operating some training programs in the areas of particular need.

The types of projects conducted indicate the subject areas in which in-service training programs are probably most needed. In addition, it is evident from the post-project evaluation reports that there is a severe need for training in project assessment techniques at the local level. The meagre and often ill-constructed evaluation designs reported by the LEAs indicate that schoolmen generally lack the necessary skills in research and evaluation to assess their efforts adequately. Local project evaluation is not sufficient to evaluate the programmatic success of Title I. Yet, the development of evaluation capability at the LEA level could serve not only to improve Title I projects, but also to benefit other areas of the school program.

IV.6 PROJECT ACTIVITIES

The fourteen major project types used throughout the data analysis provided broad descriptive categories of the central concerns of the 1302 projects. Description of the rationale behind the project assignments and of the scope of the categories has been included in Chapter II. This section summarizes the project activities within these groups. There are several limitations in these categories. First, because evaluation reports could not be relied upon for even such basic information as type of project, it had to be assumed that the activities proposed in the applications were in fact those that were conducted. Secondly, because assignments were made on the basis of brief narrative descriptions, they may not reflect the real purpose of some projects. Finally, many of the FY66 projects proposed to touch upon several different activities; one had to be selected as most central. While the "General Remedial" category was used for those projects that were either multi-purposed or too vaguely described to be classified elsewhere, it was not unusual for projects in other groups to have been at least secondarily concerned with activities outside of its primary focus. Some apparent peculiarities in enrollment and expenditure patterns and solution activities were actually the result of inadequate project type classification. The most extreme example was a large "School Readiness" project that included students from grade 12. Generally, however, the patterns do not contradict what one might anticipate.

The frequency of the major project types and their component specific types are presented in Table IV.21. The types of activities used to carry out these projects are listed in order of frequency in Table IV.22. Although each project was assigned only one project type, it was permitted as many as five solution activities depending upon what its project description discussed. Solutions that also served as project types ("Remedial Reading," "Equipment," "General Remedial," etc.) were used in two situations; first, when the project description contained no information beyond its focus ("a reading project for twenty third grade students who are achieving below grade level") or secondly, when a project type was actually used as a solution activity in a larger context. ("The project is concerned with raising the general achievement level of third grade students in reading, mathematics and science.")

The following pages summarize the descriptive information of projects by major project type. Page 79 presents New England averages for some of the information so that it is possible to compare the patterns for project types to those for New England projects as a group.

TABLE IV.21 FREQUENCY OF SPECIFIC PROJECT TYPES

[-] = under 0.5%   N = 1,302 projects

	Frequency	Percent of all projects
1. ACADEMIC INSTRUCTION	48	4%
Curriculum Development	23	2
Mathematics	14	1
Science	10	1
Foreign Languages	1	-
Social Studies	0	0
2. READING	333	26%
Remedial Reading	318	25
Developmental Reading	12	1
Reading Readiness	1	-
3. LANGUAGE ARTS	103	8%
Language Arts & Reading	41	3
Language Arts	34	3
Speech Therapy	15	1
English as Second Language	13	1
4. INSTRUCTIONAL SERVICES	66	5%
Individualized Instruction	25	2
Teacher Aides	21	2
Reduction of Class Size	19	2
Small Group Instruction	1	-
5. GENERAL REMEDIAL	398	31%
General Remedial	383	30
Drop-out Program	13	1
Summer School	2	-
6. VOCATIONAL	50	4%
Industrial Arts	30	2
Business and Office	13	1
Home Economics	4	-
Work-Study	3	-
7. SPECIAL CLASSES	44	3%
Mentally Retarded	21	2
Slow Learners	11	1
Special Education	6	1
Emotionally Disturbed	5	-
Physically Handicapped	1	-

TABLE IV.21 FREQUENCY OF SPECIFIC PROJECT TYPES (continued)

[-] = under 0.5%   N = 1,302 projects

	Frequency	Percent of all projects
8. SCHOOL READINESS	60	5%
School Readiness Programs (Pre-school and Kindergarten)	60	5
9. MATERIALS AND EQUIPMENT	28	2%
Audio-visual Equipment	10	1
Added Classroom Space	7	1
Curriculum Materials	6	1
Other Equipment	5	-
10. GUIDANCE AND PSYCHOLOGICAL SERVICES	47	4%
Guidance and Counseling	23	2
Combination of Counseling, Psychiatric, and Social Work Services	8	1
Diagnosis of Problems	7	1
Social Work	5	-
Psychological	3	-
Home-School Visiting	1	-
11. NON-ACADEMIC SERVICES TO PUPILS	30	2%
Health Services	11	1
Physical Education	10	1
Dental Services	4	-
Food Services	4	-
Transportation	1	-
12. LIBRARY	20	2%
Library	20	2
13. NON-ACADEMIC ENRICHMENT	64	5%
General Enrichment	45	4
Music	12	1
Art	4	-
Recreation	3	-
14. IN-SERVICE TRAINING	11	1%
In-Service Training	11	1

TABLE IV.22 FREQUENCY OF SOLUTION ACTIVITIES

[-] = under 0.5%

ACTIVITY	FREQUENCY	PERCENT OF PROJECTS
Additional Teaching Staff	291	22%
Remedial Reading	270	21
Mathematics	135	10
Curriculum Materials	133	10
Teacher Aides	125	10
Individualized Instruction	113	9
Small Group Instruction	112	9
Cultural Enrichment	103	8
Equipment	100	8
Guidance and Counseling	87	7
Diagnosis	84	6%
Audio-Visual	70	5
Language Arts - Remedial Reading	62	5
Health Services	61	5
English Language Arts	58	4
In-Service Training	57	4
Field Trips	54	4
General Remedial	44	3%
Curriculum Development	43	3
Physical Education	42	3
Research and Testing	42	3
Tutoring	42	3
Speech Therapy	41	3
Library Services	40	3
Summer School	39	3
Special Classes	36	3
Pre-School	35	3
Developmental Reading	31	2%
Industrial Arts/Other Vocational	31	2
Transportation Services	31	2
Psychological Services	29	2
Art	26	2
Recreation	26	2
School and Social Work Services	26	2
Kindergarten	24	2
Music	24	2
Reduction of Class Size	24	2
Science	24	2
Classroom Space plus Additional Facilities	21	2

TABLE IV.22 FREQUENCY OF SOLUTION ACTIVITIES (continued)

[-] = under 0.5%

ACTIVITY	FREQUENCY	PERCENT OF PROJECTS
Home - School Visiting	18	1%
Counseling, Psychiatric, Psychological, Social Work	18	1
After School Study Centers	17	1
Nurse	17	1
Other Sub-professional Help	16	1
Camp	15	1
English as a Second Language	13	1
Social Studies/Social Sciences	13	1
Work-Study	12	1
Business Education/Office Occupations	11	1
Slow Learners	9	1
Dental	8	1
Lunch	8	1
Pre-Kindergarten	8	1
Reading Readiness	7	1
Emotionally Disturbed	6	-
Hearing	6	-
Home Economics	6	-
Special Education	6	-
Mentally Retarded	5	-
Food Services	4	-
Psychiatric Services	4	-
Breakfast	3	-
Foreign Languages	3	-
Eye	2	-
Adult Education	1	-
Clothing Services	1	-
Make-up Facilities	1	-
Physically Handicapped	1	-
Waiver or Provisions of Fees for Books, Supplies, Materials and/or Tuition.	1	-

FY66 TITLE I PROJECTS: NEW ENGLAND SUMMARY

N = 1,302 projects

1. LOCATION

State	No.	% of All Projects
Conn.	163	13%
Maine	455	35%
Mass.	302	23%
N. H.	165	13%
R. I.	67	5%
Vt.	150	11%

SMSA	No.	% of All Projects
1	156	12%
2	26	2%
3	235	18%
4	456	35%
5	429	33%

2. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled
Proposed:	1,268	260,195	205	83%	15%	2%
Actual:	1,120	186,448	166	87%	12%	1%

3. DURATION (ACTUAL) N = 649

5-9 wks.	38%
18-22 wks.	18%
10-13 wks.	12%
14-17 wks.	11%

Summer	27%
School Year	44%
Both	23%
Unclassified	6%

4. SOLUTION ACTIVITIES (10% or more projects)

Additional Teaching Staff	22%
Remedial Reading	21%
Mathematics	10%
Curriculum Materials	10%
Teacher Aides	10%

5. EXPENDITURES BY CATEGORY (10% or more total funds)

Instruction	59%
Equipment	22%

PROJECT TYPE # 1 ACADEMIC INSTRUCTION

N = 48 4% of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
Curriculum Development	23	48%	2%
Mathematics	14	29%	1%
Science	10	21%	1%
Foreign Languages	1	2%	-
Social Sciences	0	0%	0%

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	4	8%	-
Maine	19	40%	1%
Mass.	7	15%	1%
N. H.	8	17%	1%
R. I.	4	8%	-
Vt.	6	13%	-

SMSA	No.	% Within Type	% of All Projects
1	5	10%	-
2	0	0%	0%
3	8	17%	1%
4	15	31%	1%
5	20	42%	2%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Total Students
Proposed:	47	12,476	265	91%	8%	-	5%
Actual:	43	3,105	72	93%	5%	2%	2%

4. DURATION (ACTUAL) N = 26

5-9 wks.	27%	Summer	15%
10-13 wks.	23%	School Year	54%
18-22 wks.	15%	Both	17%
All Other	35%	Unclassified	14%

5. SOLUTION ACTIVITIES (10% or more projects)

Additional Teaching Staff	33%	Curriculum Development	13%
Equipment	19%	Science	13%
Mathematics	17%	In-Service Training	10%
Curriculum Materials	15%	Audio-Visual	10%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$398,273 2.6% of Total

Instruction	73%
Equipment	17%

PROJECT TYPE #2 READING

N = 333 26% of Total

[-] = under 0.5

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
Remedial Reading	318	95%	25%
Developmental Reading	12	4%	1%
Reading Readiness	1	-	-

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	22	7%	2%
Maine	114	34%	9%
Mass.	66	20%	5%
N. H.	58	17%	4%
R. I.	26	8%	2%
Vt.	47	14%	4%

SMSA	No.	% Within Type	% of All Projects
1	23	7%	2%
2	4	1%	-
3	59	17%	5%
4	126	38%	10%
5	121	36%	9%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Tot Student
Proposed:	325	40,625	125	81%	19%	-	16%
Actual:	289	35,464	123	86%	14%	-	19%

4. DURATION (ACTUAL) N = 176

5-9 wks.	38%
10-13 wks.	10%
18-32 wks.	18%
All Other	34%

Summer	24%
School Year	48%
Both	21%
Unclassified	7%

5. SOLUTION ACTIVITIES (10% or more projects)

Additional Teaching Staff	32%
Remedial Reading	27%
Curriculum Materials	14%
Individualized Instruction	12%
Diagnosis	11%
Small Group Instruction	11%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$3,896,910 25.5 % of Total

Instruction	57%
Equipment	29%

PROJECT TYPE # 3 LANGUAGE ARTS

N = 103 8% of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
Language Arts & Reading	41	40%	3%
Language Arts	34	33%	3%
Speech Therapy	15	15%	1%
English as a Second Language	13	13%	1%

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	14	14%	1%
Maine	26	25%	2%
Mass.	30	29%	2%
N. H.	15	15%	1%
R. I.	4	4%	-
Vt.	14	14%	1%

SMSA	No.	% Within Type	% of All Projects
1	10	10%	1%
2	1	1%	-
3	23	22%	2%
4	39	38%	3%
5	30	29%	2%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrclled	% of Total Students
Proposed:	102	13,580	133	84%	15%	1%	5%
Actual:	96	11,705	122	86%	14%	-	6%

4. DURATION (ACTUAL) N = 52

5-9 wks.	33%
18-22 wks.	21%
10-13 wks.	19%
All Other	27%

Summer	26%
School Year	36%
Both	33%
Unclassified	5%

5. SOLUTION ACTIVITIES (10% or more projects)

Additional Teaching Staff	23%	Small Group Instruction	13%
Remedial Reading	17%	Speech Therapy	13%
Individualized Instruction	16%	Diagnosis	12%
English Language Arts	15%	Language & Remedial Reading	12%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$934,919 6.1% of Total

Instruction	53%
Equipment	24%

PROJECT TYPE # 4 INSTRUCTIONAL SERVICES

N = 66 5% of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
Individualized Instruction	25	38%	2%
Teacher Aides	21	32%	2%
Reduction of Class Size	19	29%	2%
Small Group Instruction	1	2%	-

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	7	11%	1%
Maine	45	68%	3%
Mass.	3	5%	-
N. H.	8	12%	1%
R. I.	1	2%	-
Vt.	2	3%	-

SMSA	No.	% Within Type	% of All Projects
1	5	8%	-
2	1	2%	-
3	4	6%	-
4	16	24%	1%
5	40	61%	3%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Total Students
Proposed:	64	18,449	288	93%	7%	-	7%
Actual:	53	12,334	233	90%	10%	0%	7%

4. DURATION (ACTUAL) N = 41

14-17 wks.	41%
10-13 wks.	17%
18-22 wks.	17%
All Other	24%

Summer	2%
School Year	79%
Both	12%
Unclassified	7%

5. SOLUTION ACTIVITIES (10% or more projects)

Teacher Aides	53%
Additional Teaching Staff	33%
Curriculum Materials	12%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$422,583 2.8% of Total

Instruction	80%
Equipment	13%

PROJECT TYPE # 5 GENERAL REMEDIAL

N = 398 31% of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
General Remedial	383	96%	30%
Drop-out Program	13	3%	1%
Summer School	2	1%	-

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	70	18%	5%
Maine	121	30%	9%
Mass.	120	30%	9%
N. H.	34	9%	3%
R. I.	14	4%	1%
Vt.	39	10%	3%

SMSA	No.	% Within Type	% of All Projects
1	53	13%	4%
2	9	2%	1%
3	87	22%	7%
4	131	33%	10%
5	118	30%	9%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Total Students
Proposed:	393	107,879	275	78%	19%	2%	41%
Actual:	359	89,594	250	89%	11%	-	48%

4. DURATION (ACTUAL) N = 212

5-9 wks.	44%
18-22 wks.	15%
14-17 wks.	13%
All Other	28%

Summer	36%
School Year	34%
Both	24%
Unclassified	6%

5. SOLUTION ACTIVITIES (10% or more projects)

Remedial Reading	36%
Mathematics	30%
Additional Teaching Staff	17%
Cultural Enrichment	15%
Guidance and Counseling	12%
Small Group Instruction	12%
Teacher Aides	11%
Individualized Instruction	10%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

	$6,934,805	45.4% of Total
Instruction	56%	
Equipment	25%	

PROJECT TYPE # 6 VOCATIONAL

N = 50 4% of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
Industrial Arts	30	60%	2%
Business and Office	13	26%	1%
Home Economics	4	8%	-
Work-Study	3	6%	-

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	0	0%	0%
Maine	38	76%	3%
Mass.	7	14%	1%
N. H.	4	8%	-
R. I.	0	0%	0%
Vt.	1	2%	-

SMSA	No.	% Within Type	% of All Projects
1	6	12%	-
2	2	4%	-
3	5	10%	-
4	28	56%	2%
5	9	18%	1%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Total Students
Proposed:	50	3,104	62	94%	4%	2%	1%
Actual:	47	1,838	39	97%	3%	0%	1%

4. DURATION (ACTUAL) N = 26

5-9 wks.	27%
10-13 wks.	19%
18-22 wks.	15%
All Other	39%

Summer	22%
School Year	46%
Both	24%
Unclassified	8%

5. SOLUTION ACTIVITIES (10% or more projects)

Industrial Arts/Other Vocational	38%
Equipment	32%
Additional Teaching Staff	18%
Business and Office	14%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$358,538 2.3% of Total

Equipment	60%
Instruction	20%

PROJECT TYPE # 7 SPECIAL CLASSES

N = 44 3% of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
Mentally Retarded	21	48%	2%
Slow Learners	11	25%	1%
Special Education	6	14%	1%
Emotionally Disturbed	5	11%	-
Physically Handicapped	1	2%	-

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	3	7%	-
Maine	21	48%	2%
Mass.	3	7%	-
N. H.	5	11%	-
R. I.	6	14%	-
Vt.	6	14%	-

SMSA	No.	% Within Type	% of All Projects
1	6	14%	-
2	1	2%	-
3	6	14%	-
4	22	50%	2%
5	9	20%	1%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Total Students
Proposed:	43	3,074	71	89%	10%	1%	1%
Actual:	31	2,903	94	85%	7%	8%	2%

4. DURATION (ACTUAL) N = 18

18-22 wks.	44%
5-9 wks.	28%
1-4 wks.	11%
All Other	17%

Summer	14%
School Year	64%
Both	18%
Unclassified	4%

5. SOLUTION ACTIVITIES (10% or more projects)

Special Classes	32%
Additional Teaching Staff	18%
Teacher Aides	14%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$438,153 2.9% of Total

Instruction	47%
Equipment	23%

PROJECT TYPE # 8 SCHOOL READINESS

N = 60 5 % of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
School Readiness Programs (Pre-School & Kindergarten)	60	100%	5%

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	13	22%	1%
Maine	12	20%	1%
Mass.	23	38%	2%
N. H.	1	2%	-
R. I.	3	5%	-
Vt.	8	13%	1%

SMSA	No.	% Within Type	% of All Projects
1	10	17%	1%
2	2	3%	-
3	20	33%	2%
4	13	22%	1%
5	15	25%	1%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Total Students
Proposed:	60	7,801	130	73%	12%	15%	3%
Actual:	49	4,156	85	96%	2%	1%	2%

4. DURATION (ACTUAL) N = 19

5-9 wks.	68%
27-30 wks.	11%
All Other	21%

Summer	58%
School Year	23%
Both	13%
Unclassified	6%

5. SOLUTION ACTIVITIES (10% or more projects)

Pre-School	38%
Kindergarten	28%
Health Services	17%

Pre-Kindergarten	13%
Additional Teaching Staff	12%
Field Trips	10%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$605,634 4.0 % of Total

Instruction	56%
Equipment	17%

PROJECT TYPE # 9 MATERIALS AND EQUIPMENT

N = 28 2 % of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
Aduio-Visual Equipment	10	36%	1%
Added Classroom Space	7	25%	1%
Curriculum Materials	6	21%	1%
Other Equipment	5	18%	-

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	5	18%	-
Maine	14	50%	1%
Mass.	1	4%	-
N. H.	7	25%	1%
R. I.	0	0%	0%
Vt.	1	4%	-

SMSA	No.	% Within Type	% of All Projects
1	2%	7%	-
2	1%	4%	-
3	2%	7%	-
4	5%	18%	-
5	18%	64%	1%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Total Students
Proposed:	26	1,604	62	98%	2%	0%	1%
Actual:	21	1,595	76	100%	-	-	1%

4. DURATION (ACTUAL) N = 12

10-13 wks.	42%
5-9 wks.	25%
31-34 wks.	17%
All Other	16%

Summer	4%
School Year	61%
Both	25%
Unclassified	10%

5. SOLUTION ACTIVITIES (10% or more projects)

Audio-Visual	36%
Equipment	25%
Health Services	11%
Individualized Instruction	11%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$80,410 0.5% of Total

Instruction	38%
Equipment	38%

PROJECT TYPE # 10 GUIDANCE AND PSYCHOLOGICAL SERVICES

N = 47 4 % of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
Guidance and Counseling	23	49%	2%
Counseling: Psychiatric, Psychological, & Social Work	8	17%	1%
Diagnosis of Problems	7	15%	1%
Social Work	5	11%	-
Psychological	3	6%	-
Home-School Visiting	1	2%	-

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	2	4%	-
Maine	6	13%	-
Mass.	21	45%	2%
N. H.	8	17%	1%
R. I.	3	6%	-
Vt.	7	15%	1%

SMSA	No.	% Within Type	% of All Projects
1	8	17%	1%
2	1	2%	-
3	9	19%	1%
4	21	45%	2%
5	8	17%	1%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Total Students
Proposed:	47	16,263	346	71%	23%	6%	6%
Actual:	34	5,623	165	94%	5%	-	3%

4. DURATION (ACTUAL) N = 14

5-9 wks.	43%
10-13 wks.	21%
18-20 wks.	14%
All Other	22%

Summer	11%
School Year	38%
Both	51%
Unclassified	0%

5. SOLUTION ACTIVITIES (10% or more projects)

Guidance and Counseling	26%
Additional Teaching Staff	23%
Diagnosis	19%
Research and Testing	19%

Counseling: Psychiatric, Psycological, and Social Work	11% 11%
Home-School Visiting	11%
Other Subprofessional Help	11%
Psychiatric Services	11%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$256,397 1.7 % of Total

Instruction	39%
Equipment	23%
Administration	10%

PROJECT TYPE # 11 NON-ACADEMIC SERVICES

N = 30 2 % of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
Health Services	11	37%	1%
Physical Education	10	33%	1%
Dental Services	4	13%	-
Food Services	4	13%	-
Transportation	1	3%	-

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	1	3%	-
Maine	10	33%	1%
Mass.	4	13%	-
N. H.	5	17%	-
R. I.	1	3%	-
Vt.	9	30%	1%

SMSA	No.	% Within Type	% of All Projects
1	5	17%	-
2	0	0%	0%
3	1	3%	-
4	13	43%	1%
5	11	37%	1%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Total Students
Proposed:	27	3,816	141	91%	8%	1%	1%
Actual:	27	6,456	239	92%	2%	5%	3%

4. DURATION (ACTUAL) N = 10

18-22 wks.	40%
5-9 wks.	30%
10-14 wks.	30%
All Other	0%

Summer	20%
School Year	67%
Both	13%
Unclassified	0%

5. SOLUTION ACTIVITIES (10% or more projects)

Physical Education	27%	Dental	13%
Health Services	13%	Nurse	10%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$ 141,751 17% of Total

Instruction	39%	Equipment	17%
Health Services	30%		

PROJECT TYPE # 12 LIBRARY SERVICES

N = 20 2% of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
Library Services	20	100%	2%

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	1	5%	-
Maine	10	50%	1%
Mass.	1	5%	-
N. H.	4	20%	-
R. I.	2	10%	-
Vt.	2	10%	-

SMSA	No.	% Within Type	% of All Projects
1	2	10%	-
2	1	5%	-
3	2	10%	-
4	8	40%	1%
5	7	35%	1%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Total Students
Proposed:	20	16,059	803*	95%	5%	-	6%
Actual:	17	5,612	330	60%	39%	-	3%

* 2 projects alone had 13,000 enrolled.

4. DURATION (ACTUAL) N = 10

5-9 wks.	30%
10-13 wks.	20%
23-26 wks.	20%
All Other	30%

Summer	5%
School Year	55%
Both	25%
Unclassified	15%

5. SOLUTION ACTIVITIES (10% or more projects)

Curriculum Materials	40%
Library Services	35%
Additional Teaching Staff	25%
After School Study Centers	15%
Teacher Aides	10%
Equipment	10%
Audio-Visual	10%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$258,607 1.7% of Total

Equipment	49%
Instruction	39%

PROJECT TYPE # 13 NON-ACADEMIC ENRICHMENT

N = 64 5 % of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
General Enrichment	45	70%	4%
Music	12	19%	1%
Art	4	6%	-
Recreation	3	5%	-

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	18	28%	1%
Maine	17	27%	1%
Mass.	13	20%	1%
N. H.	5	8%	-
R. I.	3	5%	-
Vt.	8	13%	1%

SMSA	No.	% Within Type	% of All Projects
1	17	27%	1%
2	2	2%	-
3	8	13%	1%
4	17	27%	1%
5	20	31%	2%

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Total Students
Proposed:	60	14,688	245	93%	6%	-	6%
Actual:	50	5,884	118	89%	11%	0%	3%

4. DURATION (ACTUAL) N = 30

5-9 wks.
18-22 wks.
14-17 wks.
All Other

Summer	30%
School Year	50%
Both	16%
Unclassified	4%

5. SOLUTION ACTIVITIES (10% or more projects)

Cultural Enrichment	25%	Physical Education	13%
Field Trips	17%	Art	13%
Additional Teaching Staff	16%	Audio-Visual	13%
Music	14%	Equipment	11%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$ 471,936 3.1% of Total

Instruction	57%
Equipment	20%

PROJECT TYPE # 14 IN-SERVICE TRAINING

N = 11   1% of Total

[-] = under 0.5%

1. SPECIFIC PROJECT TYPES

Type	Frequency	% Within Project Type	% of All Projects
In-Service Training	11	100%	1%

2. LOCATION

State	No.	% Within Type	% of All Projects
Conn.	3	27%	-
Maine	2	18%	-
Mass.	3	27%	-
N. H.	3	27%	-
R. I.	0	0%	0%
Vt.	0	0%	0%

SMSA	No.	% Within Type	% of All Projects
1	4	36%	-
2	1	9%	-
3	1	9%	-
4	2	18%	-
5	3	27%	-

3. ENROLLMENT

	No. of Projects	No. of Students	Mean	Percent Public	Percent Private	% Not Enrolled	% of Total Students
Proposed:	4	777	194	84%	16%	0%	-
Actual:	4	179	45	100%	0%	0%	-

4. DURATION (ACTUAL) N = 3

5-9 wks.	67%
1-4 wks.	33%
All Other	0%

Summer	55%
School Year	27%
Both	18%
Unclassified	0%

5. SOLUTION ACTIVITIES (10% or more projects)

In-Service Training	36%
Curriculum Development	27%
Audio-Visual	27%

6. EXPENDITURES BY CATEGORY (10% or more project type funds)

$ 70,603   0.5% of all New England expenditures

Instruction	76%
Equipment	12%

CHAPTER V

FINDINGS : THE FISCAL IMPACT OF TITLE I

Information on the FY66 Title I project expenditures is drawn from the final fiscal reports submitted by the LEAs to their state departments of education. Several limitations in the data that qualify their usefulness as sources of accurate total and comparative information should be noted.

1. Final expenditure data was reported by individual projects in five of the six New England states. Massachusetts, however, required that an LEA record all of its Title I expenditures in one budget report. This inconsistency in the source data does not affect the state or SMSA variable totals, but it does reduce the information available by project and therefore by major project type. When a Massachusetts LEA operated two or more projects, expenditures could not be attributed to project types because it was impossible to isolate the expenditures for its several projects individually. Expenditure data from multiple project

LEAs in Massachusetts (and one LEA in Connecticut) were therefore excluded from those analyses in which major project type was a variable. The multiple report difficulty involved 14% of the 1276 reporting projects: 176 in Massachusetts and 2 in Connecticut. As a result, budget totals for analyses by major project type are based upon 1098 projects and are therefore considerably lower than those for states and SMSAs. The population sizes upon which the statistics were computed are noted throughout the text.

2. The NEEDS study received fiscal reports on 1276 (98%) of the 1302 initially approved projects. Thus, the statistics on budget totals from these documents are slightly lower than the actual New England expenditures for all projects.

3. Non-response to certain items and incomplete sets of forms for some projects also reduced the population involved in certain analyses. Calculations requiring data from both fiscal and evaluation reports (for Title I expenditures per pupil, for example) were based upon only those projects that provided all relevant data.

4. Changes in some approved project budgets were made after the projects were in operation. Some LEAs with two or more projects transferred funds among their projects; some had their initially approved budgets increased by the state departments. To the extent that these changes post-dated the application data received by the NEEDS study, comparisons between approved budgets and expended budgets are inaccurate.

V.1 UTILIZATION OF APPROVED FUNDS

The 1276 reporting projects expended $21,830,142 in Title I funds during FY66. The distribution of these expenditures by major project type, state, and SMSA is presented in Figure V.1. Table V.1A (all Non-construction) and V.1B (Construction only) provide the SMSA by state breakdowns for all 1276 projects; Table V.2A and V.2B contain the breakdowns for the 1098 projects that were classifiable by major project type cross-tabulated with SMSA. The average project in New England used $17,108 although, as with the amounts approved, the range in expenditures was $2,068,069. Figure V.2 summarizes the average project expenditures presented in the preceding tables.

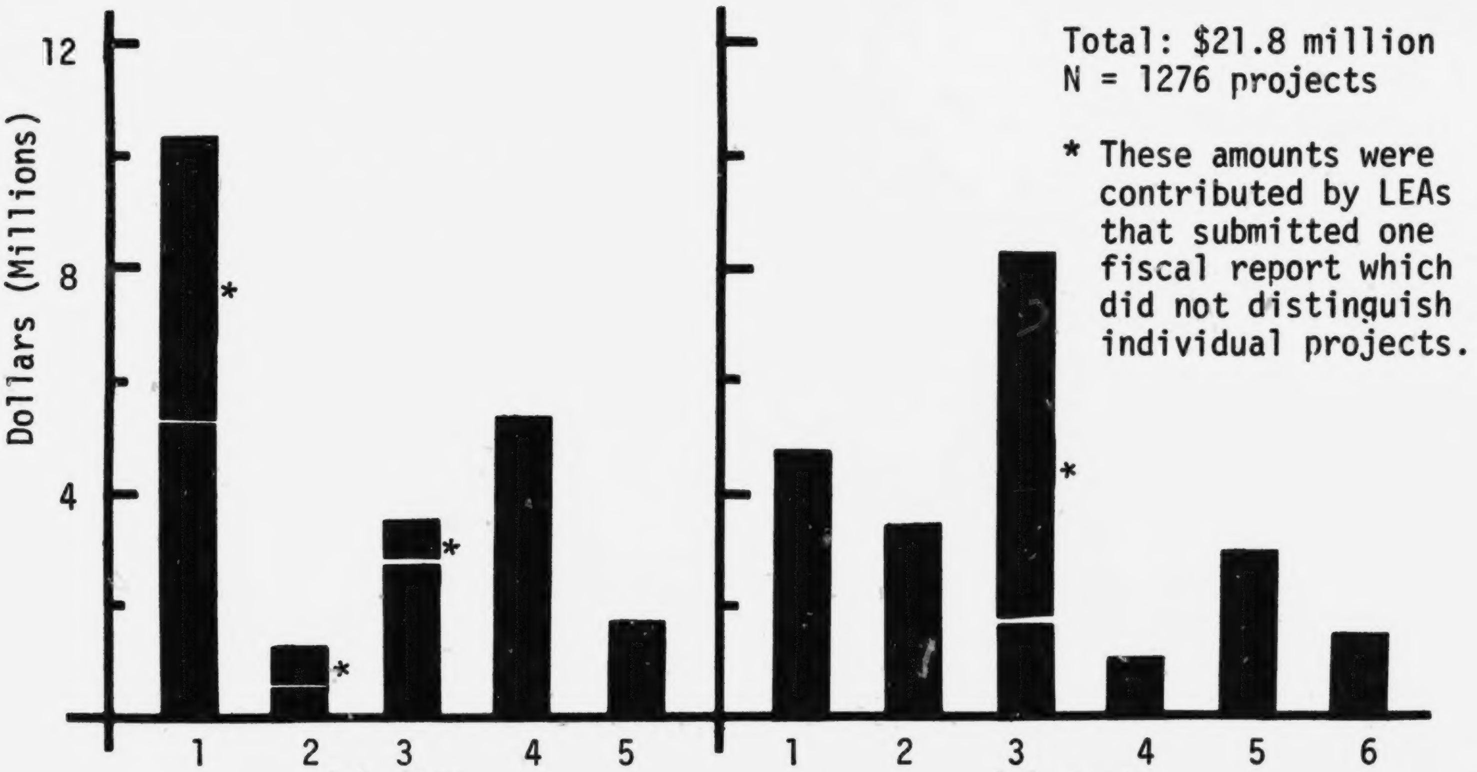
Assuming that the mean expenditure of the twenty-four (24) non-reporting projects were the same as those in corresponding SMSA and state categories that did supply final fiscal data, an additional $316,000 should be added to the FY66 expenditures making the total apprixomately $22.1 million. This figure is only 64% of the original $34.7 million allocation to New England; $12.6 million or 36% of the region's Title I funds were unused.

The $21.8 million expended by the 1276 reporting projects is 63% of the original New England allocation. The information in Figures V.3 and V.4 indicate that there are substantial differences among the states and SMSAs. The particularly low participation and utilization rates in Massachusetts pull down the rates for the region. For SMSAs, the LEAs in SMSA #3 had the low rate of 51%, followed closely by those in SMSA #2 (52%) and SMSA #5 (52%).

Table V.3 suggests that length and timing of project operation also influenced the amount of money a project spent. Yet, duration itself can be a function of local choice, state program administration policies, community size, size of maximum basic grant (which partially determines project budget limits), and project type and enrollment. If all these variables were held constant, one might anticipate a constant rate of increase in mean project expenditures as duration lengthens and a similar average monthly expenditure regardless of duration. This, however, was not the case. Average expenditures rose only slightly as duration increased and average monthly expenditures were substantially higher in shorter projects than in longer ones. The projects in the 1-4 and 5-9 week categories had the highest monthly expenditures; many of these were summer projects in which project activity was probably more intensive than in projects operated during the school year. The data do suggest that longer projects became more dilute in their fiscal impact upon the schools. Yet, a disproportionately high percent of the projects in SMSA #1 (68% compared to the 42% average for all LEAs) were operated in the 1-4 and 5-9 week duration groups. Since these projects had much larger budgets than those operated in the other SMSA groups, they strongly influenced the average expenditures for projects of short duration.

Summer projects (Table V.3) appear to have had higher expenditures on the average than those conducted during the school year, although those in the latter group could potentially have been in operation much longer. The projects that ran during both the school and the summer had the highest average expenditures (any project proposing to begin before June, 1967

FIG. V.1 TOTAL AMOUNT EXPENDED, INCLUDING CONSTRUCTION (Fiscal Data)

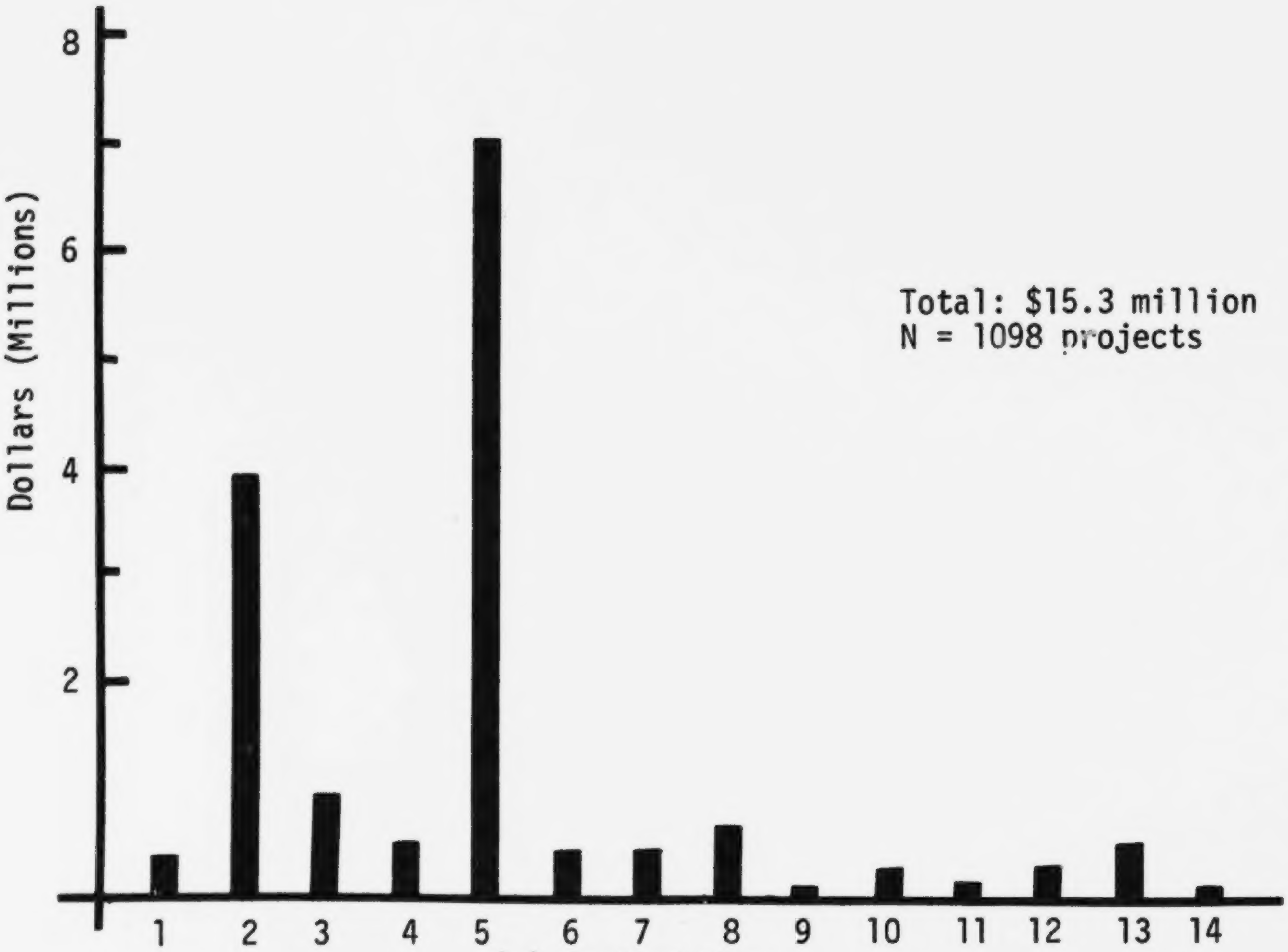


Total: $21.8 million
N = 1276 projects

* These amounts were contributed by LEAs that submitted one fiscal report which did not distinguish individual projects.

(a) SMSA

(b) State



Total: $15.3 million
N = 1098 projects

(c) Project Type

Major Variable Codes

Code	Major Project Type
1	Academic Instruction
2	Reading
3	Language Arts
4	Instructional Services
5	General Remedial
6	Vocational
7	Special Classes
8	School Readiness
9	Materials and Equipment
10	Guidance and Psychological Services
11	Non-Academic Services to Pupils
12	Library
13	Non-Academic Enrichment Activities
14	In-Service Training

Code	State
1	Connecticut
2	Maine
3	Massachusetts
4	New Hampshire
5	Rhode Island
6	Vermont

Code	SMSA
1	Metropolitan - core city
2	Metropolitan - more than 50,000
3	Metropolitan - less than 50,000
4	Non-Metropolitan - more than 2,500
5	Non-Metropolitan - less than 2,500

```
CROSS-TABULATION FOR TITLE I FISCAL REPORTS DATA                    TABLE V.1A

 THE TABULATED VARIABLE IS  TOTAL AMOUNT EXPENDED (NON-CONSTRUCTION)              GRAND COUNT      =          1276
                                                                                  GRAND MISSES     =             2
 SMSA TYPE ACROSS BY STATE DOWN                UNITS ARE DOLLARS                  GRAND TOTAL      =   21553667.00
                                                                                  GRAND MEAN       =      16891.59
                                                                                  GRAND STD. DEV.  =      72690.15
 *         1              2              3              4              5          GRAND RANGE      =    2068069.00
  *
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  3.21     41 I  0.39      5 I  4.47     57 I  3.61     46 I  0.94     12 I 12.62    161 M =   29757.41
 1 I  3044496.00  I  130139.00   I  976887.00   I  559524.00   I  75857.00    I 4790943.00  S =   64004.43
   I    0   14.13 I   0     0.60 I   0     4.53 I   0     2.60 I   0     0.37 I    0   22.23 R =  719831.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  1.57     20 I  0.         0 I  1.72     22 I 14.73    188 I 16.61    212 I 34.64    442 M =    7083.32
 2 I  356481.00   I       0.     I  141453.00   I  1842330.00  I  790563.00   I 3130827.00  S =    9576.84
   I    0    1.65 I   0    0.    I   0     0.66 I   1     8.55 I   0     3.67 I    1   14.53 R =   73612.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  5.96     76 I  1.41     18 I  9.25    118 I  5.09     65 I  1.96     25 I 23.67    302 M =   27163.40
 3 I  5046931.00  I  992579.00   I  1402391.00  I  650925.00   I  110521.00   I 8203347.00  S =  134398.44
   I    0   23.42 I   0     4.61 I   0     6.51 I   0     3.02 I   0     0.51 I    0   38.06 R = 2067761.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  0.39      5 I  0.         0 I  0.24      3 I  5.64     72 I  6.66     85 I 12.93    165 M =    6455.90
 4 I   92245.00   I       0.     I   14071.00   I  636534.00   I  322373.00   I 1065223.00  S =    8920.61
   I    0    0.43 I   0    0.    I   0     0.07 I   0     2.95 I   0     1.50 I    0    4.94 R =   62783.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  1.02     13 I  0.24      3 I  2.59     33 I  1.02     13 I  0.31      4 I  5.17     66 M =   44829.86
 5 I  1681904.00  I  107387.00   I  870551.00   I  283114.00   I   15815.00   I 2958771.00  S =   74870.72
   I    0    7.80 I   0     0.50 I   0     4.04 I   0     1.31 I   0     0.07 I    0   13.73 R =  505293.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I  0.         0 I  0.         0 I  0.         0 I  4.94     63 I  6.03     77 I 10.97    140 M =   10032.54
 6 I       0.     I       0.     I       0.     I  1008283.00  I  396273.00   I 1404556.00  S =   13861.71
   I    0    0.   I   0    0.    I   0    0.    I   1     4.68 I   0     1.84 I    1    6.52 R =   97709.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I

    12.15     155   2.04       26  18.26     233  35.03     447  32.52     415       100.00   1276
    10222057.00     1230105.00     3405353.00     4980710.00     1715442.00          21553667.00
       0   47.43       0    5.71      0    15.80      2   23.11      0    7.96           2  100.00

  M =    65948.75 M =   47311.73 M =   14615.25 M =   11142.53 M =    4133.60      M =    16891.59
  S =   196524.17 S =   66173.36 S =   17906.93 S =   13372.00 S =    4025.64      S =    72690.15
  R =  2067148.00 R =  260166.00 R =  128813.00 R =   98019.00 R =   41383.00      R =  2068069.00
```

```
CROSS-TABULATION FOR TITLE I FISCAL REPORTS DATA                    TABLE V.1B

 THE TABULATED VARIABLE IS  TOTAL AMOUNT EXPENDED (CONSTRUCTION)                  GRAND COUNT     *            22
                                                                                  GRAND MISSES    *          1256
 SMSA TYPE ACROSS BY STATE DOWN          UNITS ARE DOLLARS                        GRAND TOTAL     *     276475.00
                                                                                  GRAND MEAN      *      12567.05
                                                                                  GRAND STD. DEV. *      17306.04
*       1               2               3               4               5         GRAND RANGE     *      79506.00
 *
  I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I               I               I
  I 4.55        1 I 0.          0 I 0.          0 I 4.55        1 I 0.          0 I  9.09        2 M =    1205.50
1 I    1811.00    I       0.      I       0.      I    600.00     I       0.      I    2411.00  S =     605.50
  I  40     0.66  I   5     0.    I  57     0.    I  45     0.22  I  12     0.    I  159    0.87 R =    1211.00
  I               I               I               I               I               I
  I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I               I               I
  I 0.          0 I 0.          0 I 0.          0 I 50.00      11 I 4.55        1 I 54.55       12 M =   19344.25
2 I       0.      I       0.      I       0.      I  229847.00    I    2284.00    I  232131.00  S =   20364.51
  I  20     0.    I   0     0.    I  22     0.    I 178    83.13  I 211     0.83  I  431   83.96 R =   79081.00
  I               I               I               I               I               I
  I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I               I               I
  I 0.          0 I 0.          0 I 22.73       5 I 9.09        2 I 0.          0 I 31.82        7 M =    5977.86
3 I       0.      I       0.      I   26325.00    I   15520.00    I       0.      I   41845.00  S =    6996.96
  I  76     0.    I  18     0.    I 113     9.52  I  63     5.61  I  25     0.    I  295   15.14 R =   15476.00
  I               I               I               I               I               I
  I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I               I               I
  I 0.          0 I 0.          0 I 0.          0 I 0.          0 I 0.          0 I  0.          0 M =       0.
4 I       0.      I       0.      I       0.      I       0.      I       0.      I        0.   S =       0.
  I   5     0.    I   0     0.    I   3     0.    I  72     0.    I  85     0.    I  165    0.   R =       0.
  I               I               I               I               I               I
  I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I               I               I
  I 0.          0 I 0.          0 I 0.          0 I 0.          0 I 0.          0 I  0.          0 M =       0.
5 I       0.      I       0.      I       0.      I       0.      I       0.      I        0.   S =       0.
  I  13     0.    I   3     0.    I  33     0.    I  13     0.    I   4     0.    I   66    0.   R =       0.
  I               I               I               I               I               I
  I---------------I---------------I---------------I---------------I---------------I
  I               I               I               I               I               I
  I 0.          0 I 0.          0 I 0.          0 I 0.          0 I 4.55        1 I  4.55        1 M =      88.00
6 I       0.      I       0.      I       0.      I       0.      I      88.00    I      88.00  S =       0.
  I   0     0.    I   0     0.    I   0     0.    I  64     0.    I  76     0.03  I  140    0.03 R =       0.
  I               I               I               I               I               I
  I---------------I---------------I---------------I---------------I---------------I

   4.55       1   0.            0  22.73       5  63.64      14   9.09       2        100.00      22
      1811.00           0.           26325.00        245967.00        2372.00             276475.00
   154    0.66     26   0.           228    9.52    435   88.97    413    0.66          1256  100.00

 M =      1811.00 M =          0.    M =    5265.00 M =    17569.07 M =     1186.00       M *   12567.05
 S =        0.    S =          0.    S =    6532.60 S =    19606.05 S =     1098.00       S *   17306.04
 R =        0.    R =          0.    R =   15476.00 R =    79081.00 R =     2196.00       R =   79506.00
```

```
CROSS-TABULATION FOR TITLE I FISCAL REPORTS DATA                  TABLE V.2A

 THE TABULATED VARIABLE IS  TOTAL AMOUNT EXPENDED  (NON-CONSTRUCTION)          GRAND COUNT     *            1098
                                                                               GRAND MISSES    *               2
 SMSA TYPE ACROSS BY MAJOR PROJECT TYPE DOWN                                   GRAND TOTAL     *     15018241.00
                                                                               GRAND MEAN      *        13677.82
                                                                               GRAND STD. DEV. *        24372.49
*       1          2          3          4          5                          GRAND RANGE     *       719527.00
 *
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.27      3 I  0.        0 I  0.64      7 I  1.18     13 I  1.82     20 I  3.92      43 M =    9262.16
1 I  140776.00   I       0.     I   42210.00   I  154289.00   I   60958.00   I  398273.00  S =   18032.37
  I   0    0.94  I   0    0.    I   0    0.28  I   0    1.03  I   0    0.41  I   0     2.65 R =  110957.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  1.37     15 I  0.18      2 I  4.28     47 I 10.38    114 I 10.66    117 I 26.87     255 M =   13061.83
2 I  1177384.00  I   215601.00  I  877395.00   I  1065792.00  I  517067.00   I  3853239.00  S =   34731.48
  I   0    7.84  I   0    1.44  I   0    5.84  I   0    7.10  I   0    3.44  I   0    25.66 R =  606244.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.36      4 I  0.        0 I  1.64     18 I  3.10     34 I  2.55     28 I  7.65      84 M =    5891.83
3 I   82769.00   I       0.     I  258676.00   I  384579.00   I  164890.00   I  830914.00  S =   12154.68
  I   0    0.55  I   0    0.    I   0    1.72  I   0    2.56  I   0    0.70  I   0     5.53 R =   55842.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.27      3 I  0.09      1 I  0.36      4 I  1.46     16 I  3.64     40 I  5.83      64 M =    6601.48
4 I  170774.00   I    9779.00   I   28369.00   I  107014.00   I  166559.00   I  422495.00  S =   18752.74
  I   0    1.14  I   0    0.07  I   0    0.19  I   0    0.71  I   0    0.71  I   0     2.81 R =  151863.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  2.19     24 I  0.27      3 I  6.38     70 I 10.75    118 I 10.29    113 I 29.87     328 M =   21107.55
5 I  2668564.00  I   233207.00  I  1220874.00  I  2221530.00  I  579102.00   I  6523277.00  S =   49244.41
  I   0   17.77  I   0    1.55  I   0    8.13  I   1   14.79  I   0    3.86  I   1    46.10 R =  719508.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.27      3 I  0.        0 I  0.36      4 I  2.46     27 I  0.73      8 I  3.83      42 M =    7270.26
6 I   20022.00   I       0.     I   25264.00   I  215627.00   I   44438.00   I  305351.00  S =    6964.25
  I   0    0.13  I   0    0.    I   0    0.17  I   1    1.44  I   0    0.30  I   1     2.03 R =   35005.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.46      5 I  0.        0 I  0.36      4 I  2.00     22 I  0.82      9 I  3.64      40 M =    9983.85
7 I  257048.00   I       0.     I   13465.00   I   93135.00   I   35706.00   I  399354.00  S =   19549.55
  I   0    1.71  I   0    0.    I   0    0.09  I   0    0.62  I   0    0.24  I   0     2.66 R =   91809.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
  I              I              I              I              I              I
  I  0.36      4 I  0.        0 I  1.28     14 I  1.00     11 I  1.37     15 I  4.01      44 M =   13764.41
8 I  274930.00   I       0.     I  185909.00   I   84654.00   I   60141.00   I  605634.00  S =   24310.36
  I   0    1.83  I   0    0.    I   0    1.24  I   0    0.56  I   0    0.40  I   0     4.03 R =  135990.00
  I              I              I              I              I              I
  I--------------I--------------I--------------I--------------I--------------I
```

```
CROSS-TABULATION FOR TITLE I FISCAL REPORTS DATA                    TABLE V.2A (CONT.)

     I--------------I--------------I--------------I--------------I--------------I
     I              I              I              I              I              I
     I 0.09       1 I 0.09       1 I 0.18       2 I 0.46       5 I 1.55      17 I 2.37       26 M =    3092.69
   9 I   1873.00    I   1623.00    I   12838.00   I   28469.00   I   35607.00   I  80410.00   S =    3096.93
     I   0    0.01  I   0    0.01  I   0    0.09  I   0    0.19  I   0    0.24  I  0     0.54 R =   12764.00
     I              I              I              I              I              I
     I--------------I--------------I--------------I--------------I--------------I
     I              I              I              I              I              I
     I 0.36       4 I 0.         0 I 0.46       5 I 1.46      16 I 0.46       5 I 2.73       30 M =    8546.57
  10 I   73529.00   I      0.      I   72192.00   I   97212.00   I   13464.00   I  256397.00  S =    7489.32
     I   0    0.49  I   0    0.    I   0    0.48  I   0    0.65  I   0    0.09  I  0     1.71 R =   30925.00
     I              I              I              I              I              I
     I--------------I--------------I--------------I--------------I--------------I
     I              I              I              I              I              I
     I 0.18       2 I 0.         0 I 0.09       1 I 1.09      12 I 0.91      10 I 2.28       25 M =    5670.04
  11 I   14898.00   I      0.      I   25587.00   I   73312.00   I   27954.00   I  141751.00  S =    5932.00
     I   0    0.10  I   0    0.    I   0    0.17  I   0    0.49  I   0    0.19  I  0     0.94 R =   25173.00
     I              I              I              I              I              I
     I--------------I--------------I--------------I--------------I--------------I
     I              I              I              I              I              I
     I 0.09       1 I 0.09       1 I 0.18       2 I 0.73       8 I 0.64       7 I 1.73       19 M =   13610.89
  12 I  102428.00   I   40921.00   I   25769.00   I   69398.00   I   20091.00   I  258607.00  S =   22977.76
     I   0    0.68  I   0    0.27  I   0    0.17  I   0    0.46  I   0    0.13  I  0     1.72 R =  101565.00
     I              I              I              I              I              I
     I--------------I--------------I--------------I--------------I--------------I
     I              I              I              I              I              I
     I 0.73       8 I 0.09       1 I 0.73       8 I 1.18      13 I 1.73      19 I 4.46       49 M =    9631.35
  13 I  200077.00   I    6453.00   I   96770.00   I   83275.00   I   85361.00   I  471936.00  S =   12803.47
     I   0    1.33  I   0    0.04  I   0    0.64  I   0    0.55  I   0    0.57  I  0     3.14 R =   72249.00
     I              I              I              I              I              I
     I--------------I--------------I--------------I--------------I--------------I
     I              I              I              I              I              I
     I 0.18       2 I 0.09       1 I 0.09       1 I 0.18       2 I 0.27       3 I 0.82        9 M =    7644.78
  14 I   47579.00   I   10233.00   I    2488.00   I    3447.00   I    6856.00   I   70603.00  S =    9094.27
     I   0    0.32  I   0    0.07  I   0    0.02  I   0    0.02  I   0    0.05  I  0     0.47 R =   26407.00
     I              I              I              I              I              I
     I--------------I--------------I--------------I--------------I--------------I

       7.19      79    0.91      10   17.03     187   37.43     411   37.43     411       100.00   1098
      5232651.00      517817.00       2887806.00      4681733.00      1698234.00          15018241.00
        0   34.84       0    3.45       0   19.23       2   31.17       0   11.31              2  100.00

     M =    66236.09 M =   51781.70 M =   15442.81 M =   11391.08 M =    4131.96     M =   13677.62
     S =   104187.15 S =   55142.89 S =   17523.57 S =   13276.67 S =    3977.79     S =   34372.50
     R =   719006.00 R =  179722.00 R =  128813.00 R =   98019.00 R =   41383.00     R =  719927.00
```

```
CROSS-TABULATION FOR TITLE I FISCAL REPORTS DATA                        TABLE V.2B

 THE TABULATED VARIABLE IS  TOTAL AMOUNT EXPENDED (CONSTRUCTION)                    GRAND COUNT     =          17
                                                                                    GRAND MISSES    =        1083
 SMSA TYPE ACROSS BY MAJOR PROJECT TYPE DOWN      UNITS ARE DOLLARS                 GRAND TOTAL     =   251278.00
                                                                                    GRAND MEAN      =    14781.06
*         1              2              3              4              5             GRAND STD. DEV. =    18869.86
 *                                                                                  GRAND RANGE     =    79506.00
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 0.          0 I 0.          0 I 0.          0 I 0.         0 M =       0.
 1 I        0.    I        0.    I        0.    I        0.    I        0.    I       0.    S =       0.
   I   3    0.    I   0    0.    I   7    0.    I  13    0.    I  20    0.    I  43    0.    R =       0.
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 11.76       2 I 17.65       3 I 5.88        1 I 35.29      6 M =   7278.50
 2 I        0.    I        0.    I    16648.00  I    24739.00  I    2284.00   I   43671.00  S =   6494.31
   I  15    0.    I   2    0.    I  45    6.63  I 111    9.85  I 116    0.91  I 289   17.38 R =  15545.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 0.          0 I 11.76       2 I 0.          0 I 11.76      2 M =  52002.50
 3 I        0.    I        0.    I        0.    I    104005.00 I        0.    I  104005.00  S =  27551.50
   I   4    0.    I   0    0.    I  18    0.    I  32   41.39  I  28    0.    I  82   41.39 R =  55183.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 0.          0 I 0.          0 I 5.88        1 I 5.88       1 M =     88.00
 4 I        0.    I        0.    I        0.    I        0.    I      88.00   I      88.00  S =       0.
   I   3    0.    I   1    0.    I   4    0.    I  16    0.    I  39    0.04  I  63    0.04 R =       0.
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 5.88        1 I 0.          0 I 0.          0 I 11.76       2 I 0.          0 I 17.65      3 M =   3842.67
 5 I     1811.00  I        0.    I        0.    I     9717.00  I        0.    I   11528.00  S =   3762.14
   I  23    0.72  I   3    0.    I  70    0.    I 117    3.87  I 113    0.    I 326    4.59 R =   8517.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 0.          0 I 17.65       3 I 0.          0 I 17.65      3 M =  17729.00
 6 I        0.    I        0.    I        0.    I    53187.00  I        0.    I   53187.00  S =   4562.66
   I   3    0.    I   0    0.    I   4    0.    I  25   21.17  I   8    0.    I  40   21.17 R =  11012.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 0.          0 I 11.76       2 I 0.          0 I 11.76      2 M =  19355.50
 7 I        0.    I        0.    I        0.    I    38759.00  I        0.    I   38759.00  S =  13821.50
   I   5    0.    I   0    0.    I   4    0.    I  20   15.44  I   9    0.    I  38   15.44 R =  27643.00
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
   I              I              I              I              I              I
   I 0.          0 I 0.          0 I 0.          0 I 0.          0 I 0.          0 I 0.         0 M =       0.
 8 I        0.    I        0.    I        0.    I        0.    I        0.    I       0.    S =       0.
   I   4    0.    I   0    0.    I  14    0.    I  11    0.    I  15    0.    I  44    0.    R =       0.
   I              I              I              I              I              I
   I--------------I--------------I--------------I--------------I--------------I
```

```
CROSS-TABULATION FOR TITLE I FISCAL REPORTS DATA                    TABLE V.23 (CONT.)

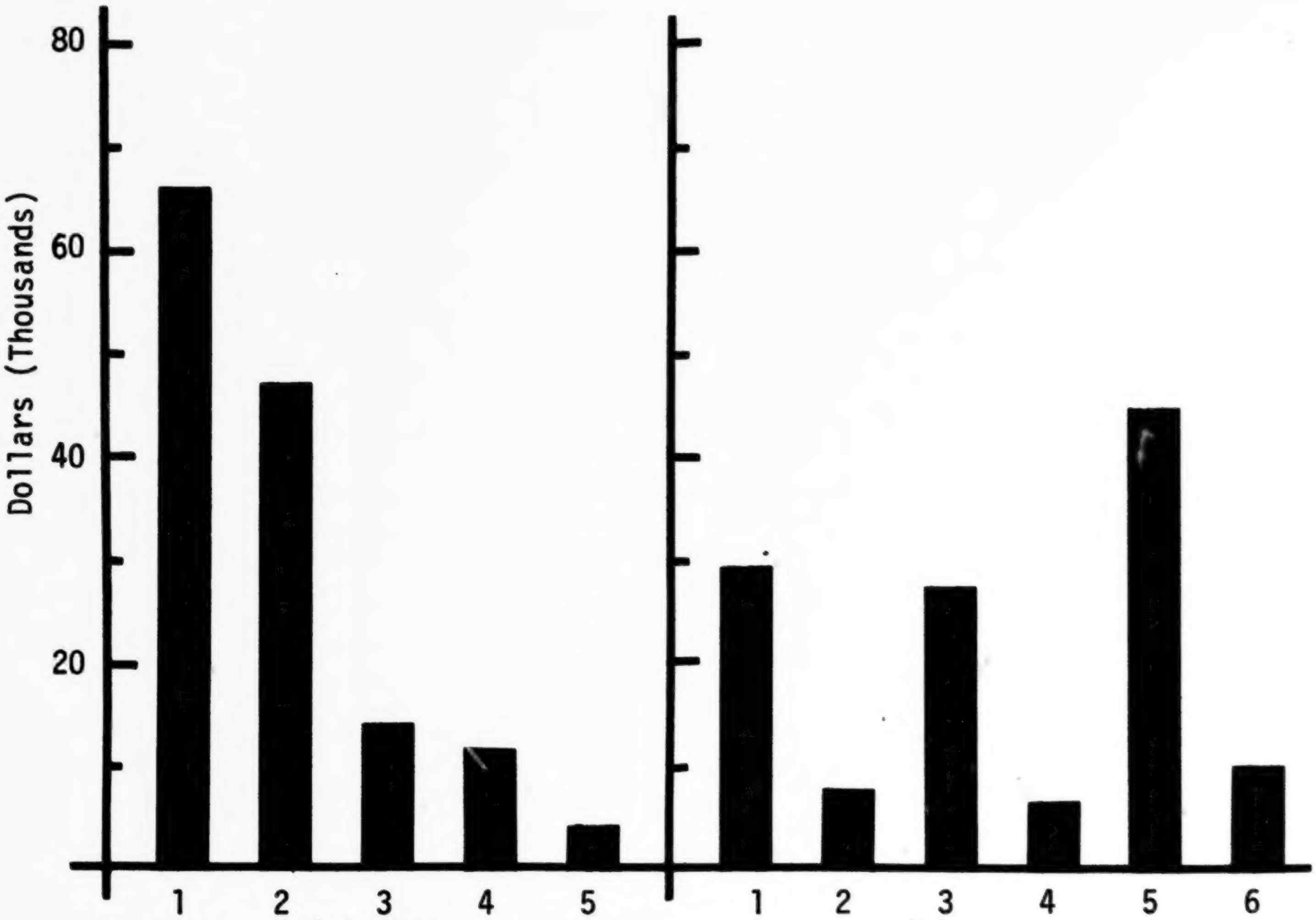

     I--------------I--------------I--------------I--------------I--------------I
     I              I              I              I              I              I
     I 0.          0I 0.          0I 0.          0I 0.          0I 0.          0I 0.        0 M =        0.
   9 I       0.     I       0.     I       0.     I       0.     I       0.     I        0.    S =        0.
     I   1   0.     I   1   0.     I   2   0.     I   5   0.     I  17   0.     I  26    0.    R =        0.
     I              I              I              I              I              I
     I--------------I--------------I--------------I--------------I--------------I
     I              I              I              I              I              I
     I 0.          0I 0.          0I 0.          0I 0.          0I 0.          0I 0.        0 M =        0.
  10 I       0.     I       0.     I       0.     I       0.     I       0.     I        0.    S =        0.
     I   4   0.     I   0   0.     I   5   0.     I  16   0.     I   5   0.     I  30    0.    R =        0.
     I              I              I              I              I              I
     I--------------I--------------I--------------I--------------I--------------I
     I              I              I              I              I              I
     I 0.          0I 0.          0I 0.          0I 0.          0I 0.          0I 0.        0 M =        0.
  11 I       0.     I       0.     I       0.     I       0.     I       0.     I        0.    S =        0.
     I   2   0.     I   0   0.     I   1   0.     I  12   0.     I  10   0.     I  25    0.    R =        0.
     I              I              I              I              I              I
     I--------------I--------------I--------------I--------------I--------------I
     I              I              I              I              I              I
     I 0.          0I 0.          0I 0.          0I 0.          0I 0.          0I 0.        0 M =        0.
  12 I       0.     I       0.     I       0.     I       0.     I       0.     I        0.    S =        0.
     I   1   0.     I   1   0.     I   2   0.     I   8   0.     I   7   0.     I  19    0.    R =        0.
     I              I              I              I              I              I
     I--------------I--------------I--------------I--------------I--------------I
     I              I              I              I              I              I
     I 0.          0I 0.          0I 0.          0I 0.          0I 0.          0I 0.        0 M =        0.
  13 I       0.     I       0.     I       0.     I       0.     I       0.     I        0.    S =        0.
     I   8   0.     I   1   0.     I   8   0.     I  13   0.     I  19   0.     I  49    0.    R =        0.
     I              I              I              I              I              I
     I--------------I--------------I--------------I--------------I--------------I
     I              I              I              I              I              I
     I 0.          0I 0.          0I 0.          0I 0.          0I 0.          0I 0.        0 M =        0.
  14 I       0.     I       0.     I       0.     I       0.     I       0.     I        0.    S =        0.
     I   2   0.     I   1   0.     I   1   0.     I   2   0.     I   3   0.     I   9    0.    R =        0.
     I              I              I              I              I              I
     I--------------I--------------I--------------I--------------I--------------I

       5.88      1   0.          0   11.76     2   70.59    12   11.76     2      100.00     17
         1811.00           0.          16648.00      230447.00        2372.00         251278.00
        78    0.72     10    0.       185    6.63   401   91.71   409    0.94      1083  100.00

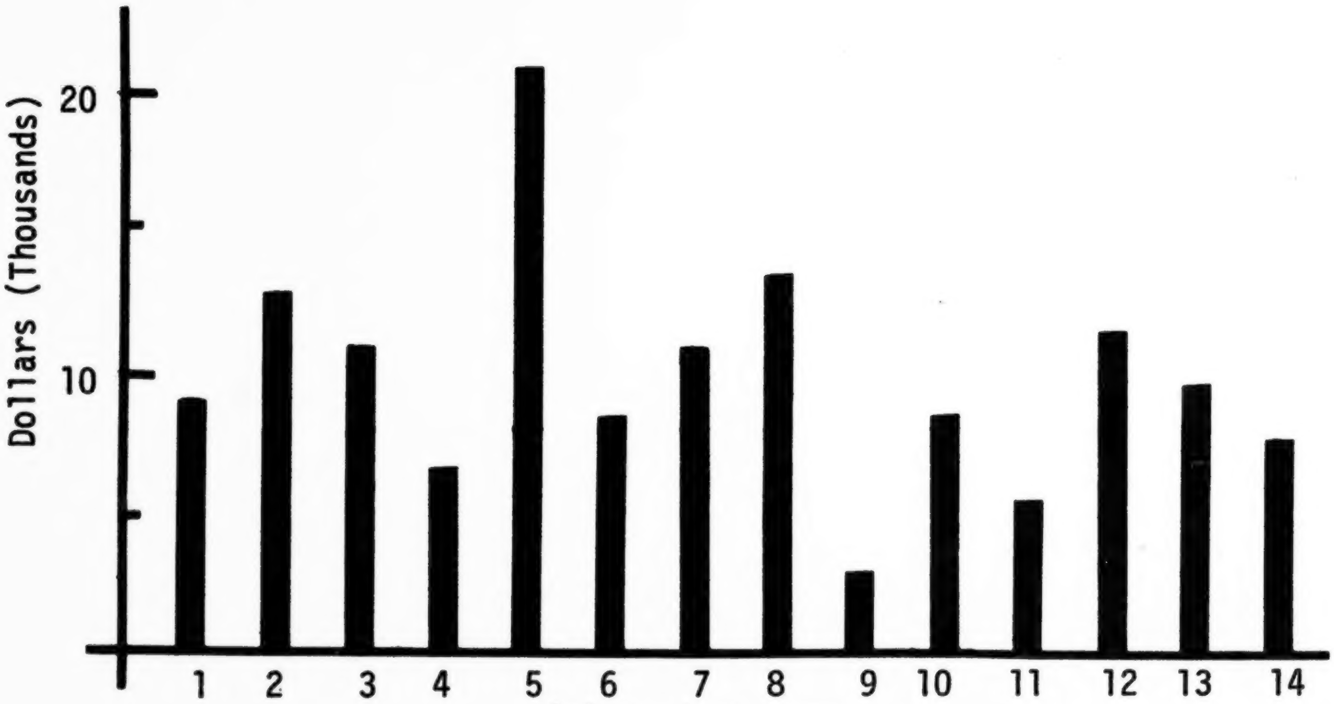
     M =    1811.00 M =        0.  M =    8324.00 M =   19203.92 M =    1186.00     M =   14781.06
     S =         0. S =        0.  S =    7738.00 S =   20487.03 S =    1098.00     S =   18809.86
     R =         0. R =        0.  R =   15476.00 R =   79081.00 R =    2196.00     R =   79506.00
```

FIG. V.2 MEAN PROJECT EXPENDITURE, INCLUDING CONSTRUCTION

(Fiscal Data)

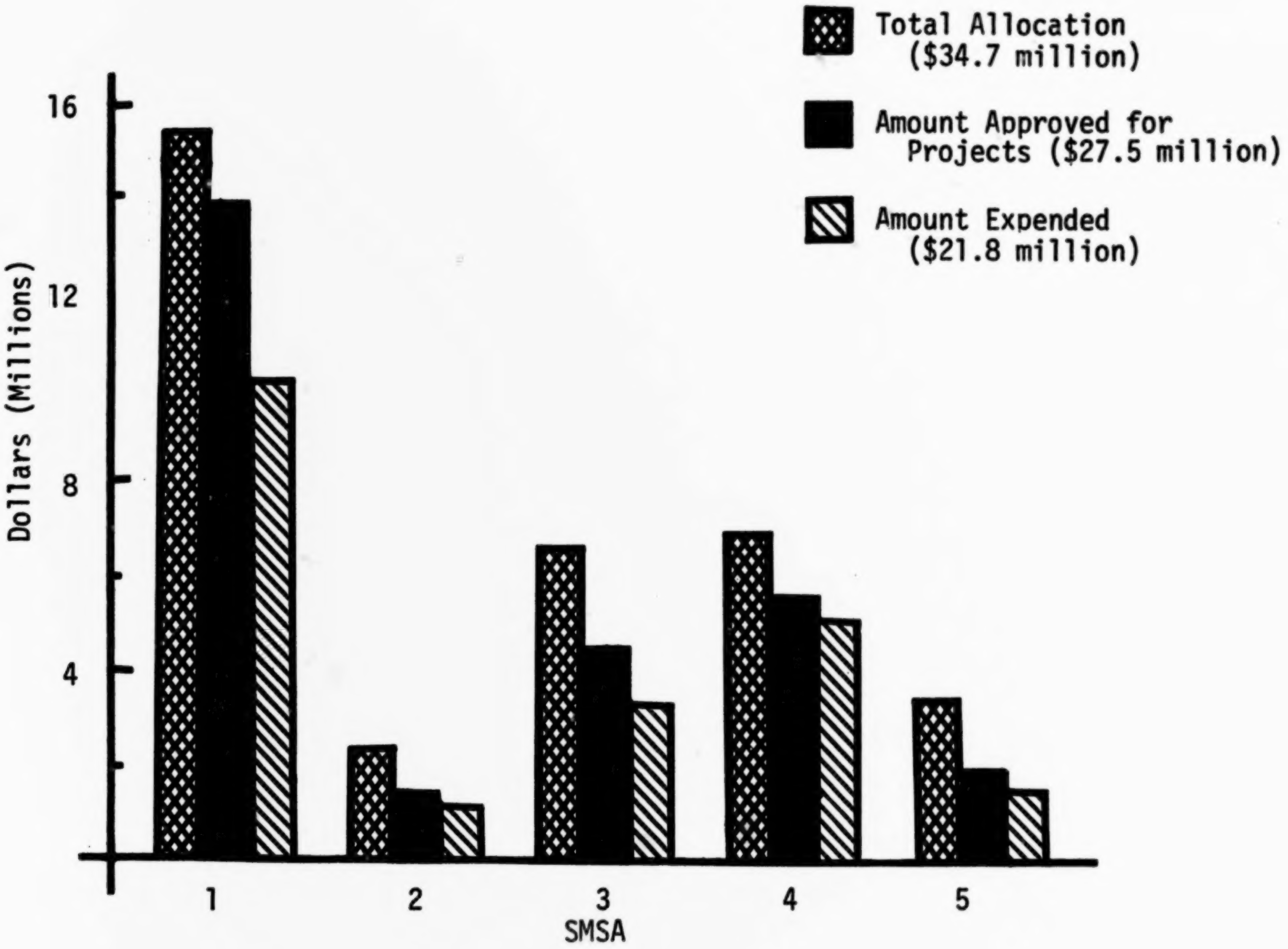


(a) SMSA (b) State



(c) Project Type

FIG. V.3 FY66 TITLE I FUNDS IN NEW ENGLAND SMSAS



Percent of Total Allocation Expended
Mean = 63%

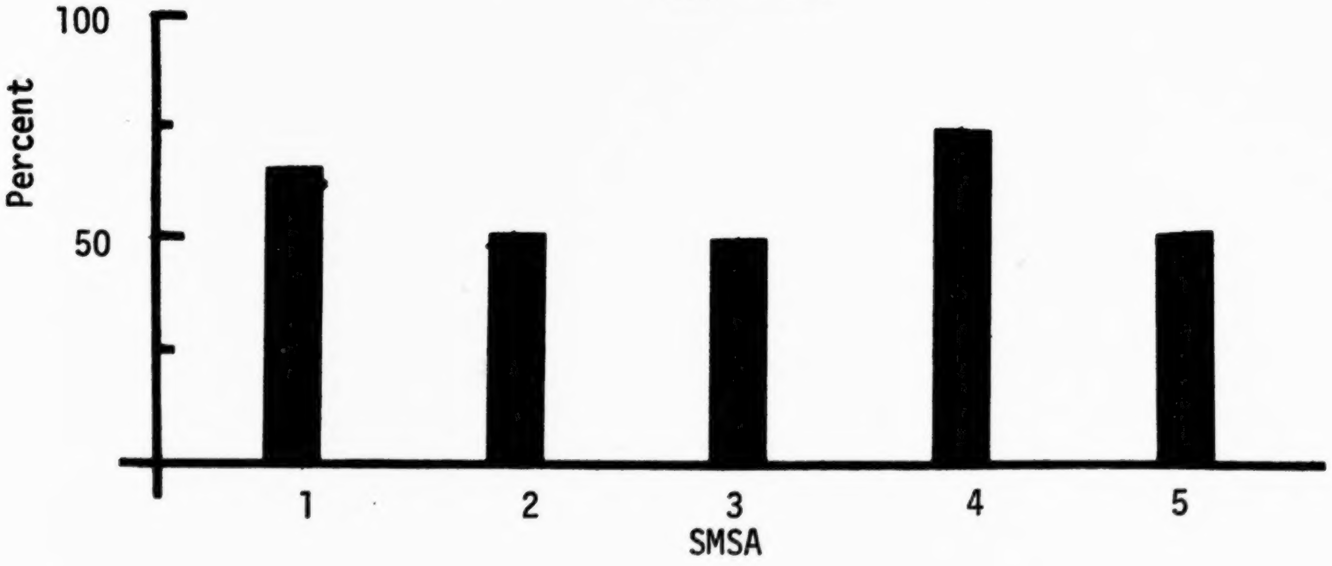
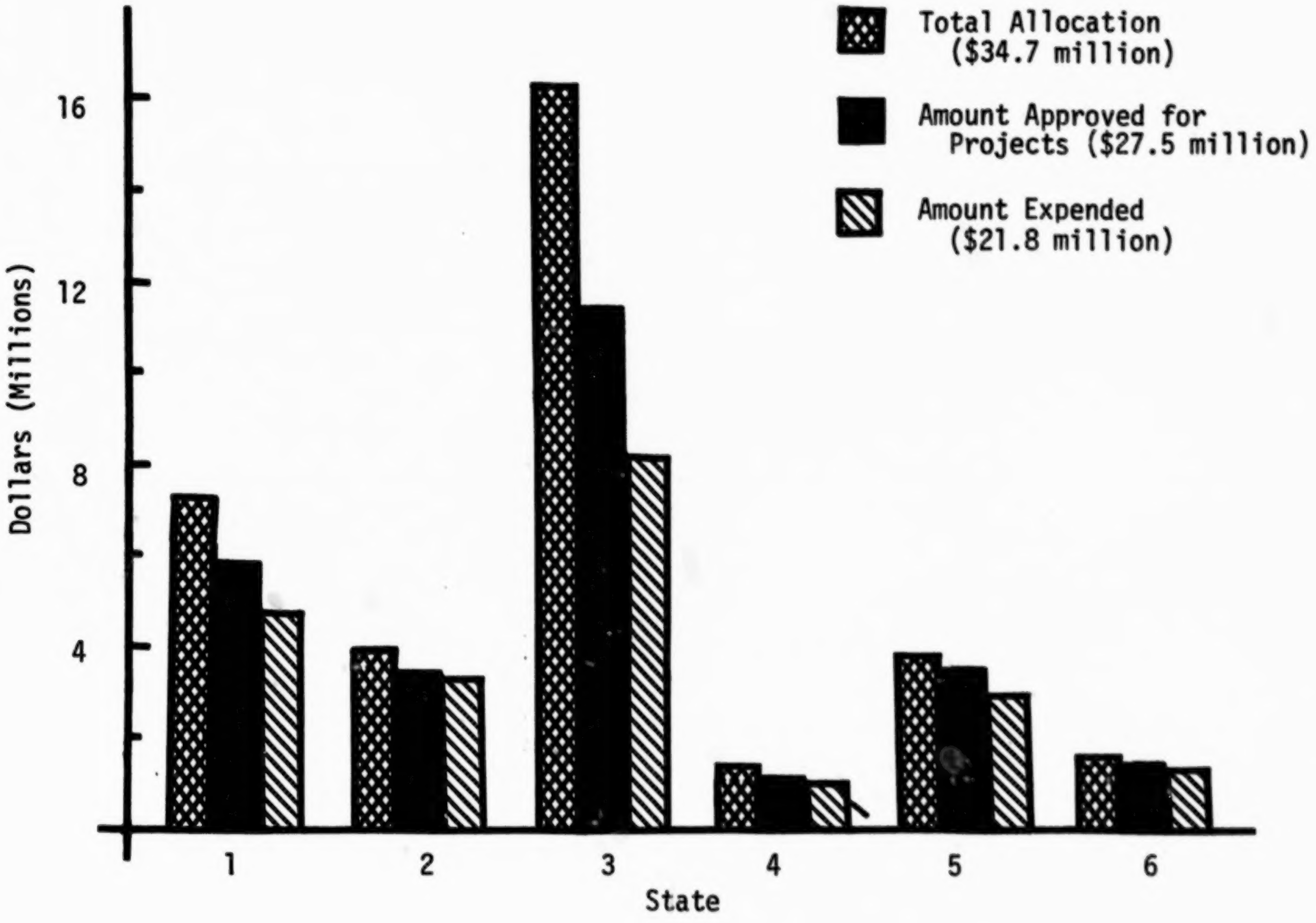


FIG. V.4 FY66 TITLE I FUNDS IN NEW ENGLAND STATES



Percent of Total Allocation Expended
Mean = 63%

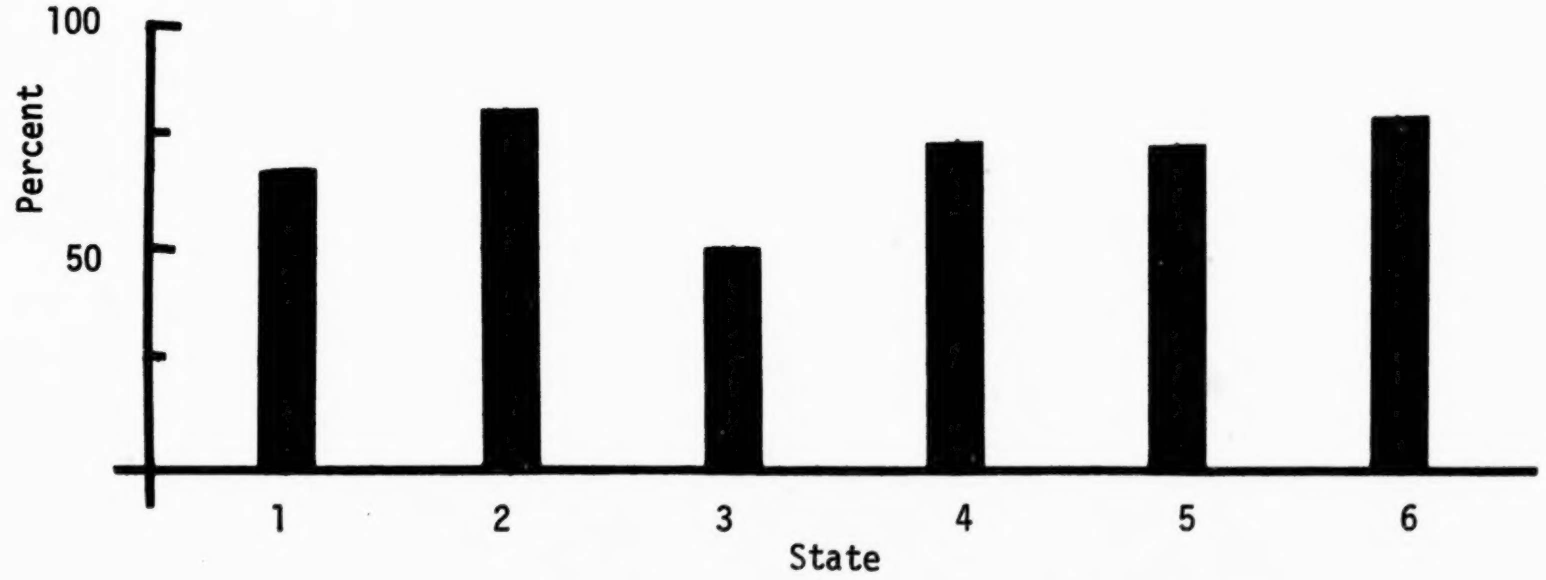


TABLE V.3 EXPENDITURES BY DURATION OF PROJECT

DURATION	NO. OF PROJECTS	PERCENT OF PROJECTS	TOTAL AMOUNT SPENT	AVERAGE AMOUNT SPENT	AVERAGE PER MONTH
1- 4 Weeks	27	4%	$ 317,255	$ 11,750	$11,750
5- 9	244	38	4,705,704	19,285	9,643
10-13	81	13	876,737	10,823	3,608
14-17	73	11	760,511	10,417	2,604
18-22	112	17	1,413,413	12,619	2,524
23-26	38	6	478,622	12,595	2,099
27-30	33	5	1,059,229	32,097	4,585
31-34	17	3	190,538	11,208	1,401
35-39	7	1	26,185	3,740	415
40-43	4	1	44,627	11,156	1,116
44-47	1	-	9,979	9,979	907
48-52	4	1	208,531	52,132	4,344
TOTAL	641	100%	$10,091,331	$15,743	$4,263

TIME OF OPERATION	NO. OF PROJECTS	PERCENT OF PROJECTS	TOTAL AMOUNT SPENT	AVERAGE AMOUNT SPENT
Summer	263	24%	$4,477,465	$17,025
School Year	530	48	3,987,074	7,523
Both Summer and School Year	229	21	5,930,088	25,896
Unclassified	76	7	623,614	8,205
TOTAL	1098	100%	$15,018,241	$13,678

and end in July or August, 1967 was placed in the "Both" category). This pattern is reasonable since these generally combined length with concentrated summer activities. The average expenditure for the "Both" category is approximately the same as the combined averages of summer and school year projects.

The average project used 80% of its approved budget. The percentages of the approved grants that were actually expended are presented in Figure V.5 for the three groups of major variables. The largest differences occur among project types; "Vocational" projects (#6) spent at the high rate of 95% while "In-Service Training" (#14) was the only project group to fall below a 50% utilization rate. State also appears to have had an influence. Massachusetts, the state with the lowest participation rate, also had the lowest expenditure rate (71%). The other five states all used at least 82% of their approved funds. The data also suggest that projects in core-city and suburban LEAs (SMSAs 1 and 3) tended to spend proportionately less of their budgets than those in SMSAs 2, 4, and 5. Figure V.6 further illustrates the wide variation in the project expenditure rates. The high number of projects in the "More than 100%" group results primarily from (1) transferal of funds from one project to another within an LEA, thereby increasing the recipient project expenditures to an amount greater than was originally approved, and (2) ammendments to project budgets made after a project was in operation but not noted on the application data received by this study. Seventy percent (70%) of the projects used over 90% of their budgeted funds; only 57 projects (4%) spent less than half of what they had proposed.

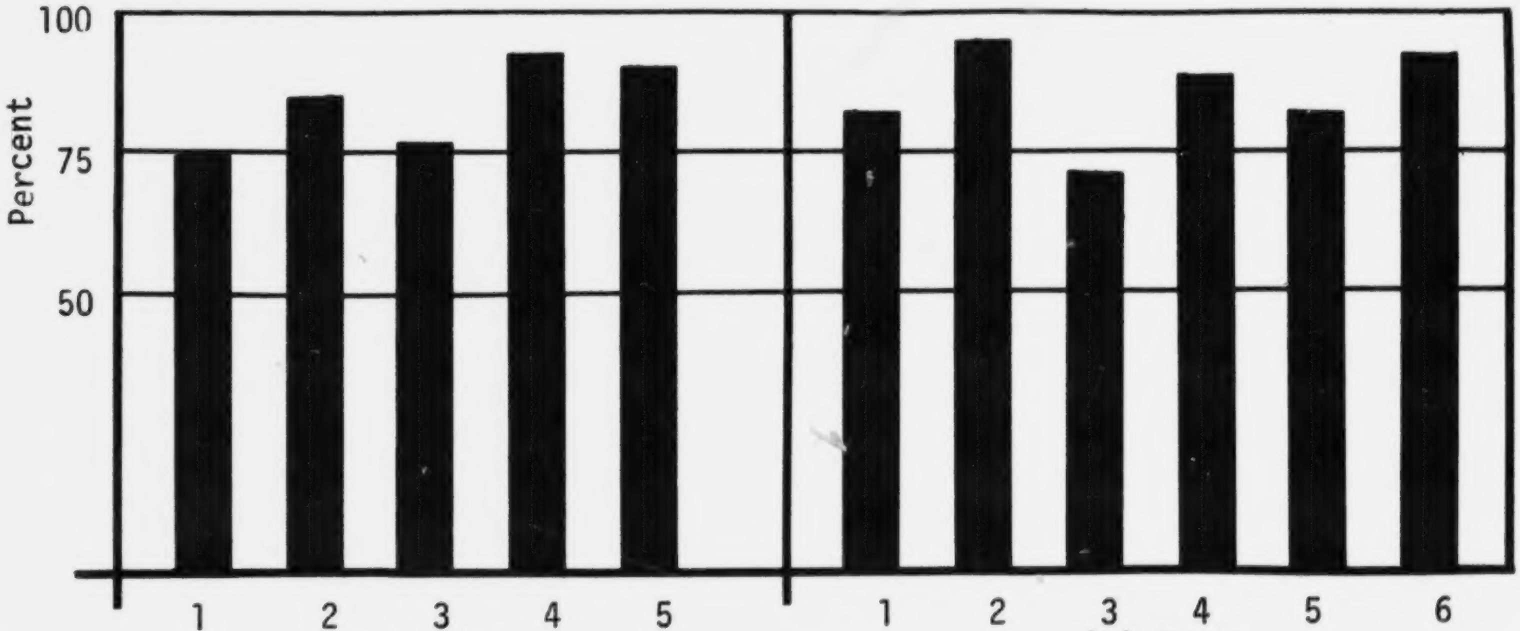
V.2 EXPENDITURES PER PUPIL

The number of children who participated in Title I as reported in the post-project evaluations proved to be 19% lower than the enrollments estimated in project applications. Since expenditures fell below anticipation to about the same degree (20%), the average Title I expenditure per participant child across New England as a whole was not appreciably affected. Yet, as Figure V.7 and Table V.4 illustrate, there were marked changes for some of the SMSAs, states, and project types. The fluctuations in these groups were a function of both project enrollments and expenditures rates. A drop in the actual enrollment that was larger than the corresponding drop in expenditure increased the expenditure per pupil; a low utilization rate, on the other hand, without a proportionately low enrollment rate caused the actual expenditure per pupil to fall below the proposed amount.

The most extreme shift from anticipated to actual expenditures per pupil occurred in SMSA 3, the suburban LEAs. LEAs in SMSA 1 showed the least change in expenditure per pupil. These two community type groups both spent less of their approved budgets than the other three (see Figure V.5), yet LEAs in SMSA 1 reported a decrease in average project enrollment while those in SMSA 3 reported a sharp increase. Since, in SMSA 1, the ratio of actual project participants to expenditures was quite similar to the proposed ratio its average expenditures per pupil differed by only three dollars ($3.00). In SMSA 3, however, less than the anticipated amount of money was spread over more than the anticipated number of children causing the expenditure per pupil to drop by $68.00. Similar reversals

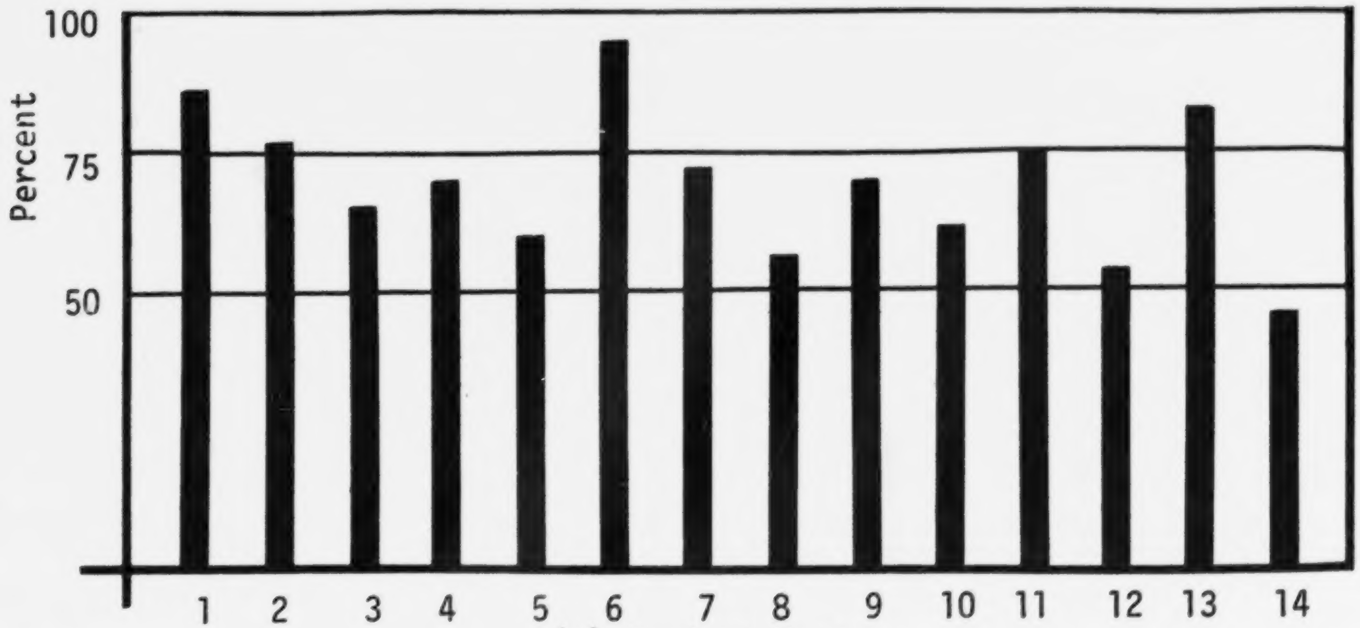
FIG. V.5 MEAN PROJECT EXPENDITURES AS A PERCENT OF MONEY APPROVED

Overall Expenditure = 80%



(a) SMSA

(b) State



(c) Project Type

Major Variable Codes

Code	Major Project Type
1	Academic Instruction
2	Reading
3	Language Arts
4	Instructional Services
5	General Remedial
6	Vocational
7	Special Classes
8	School Readiness
9	Materials and Equipment
10	Guidance and Psychological Services
11	Non-Academic Services to Pupils
12	Library
13	Non-Academic Enrichment Activities
14	In-Service Training

Code	State
1	Connecticut
2	Maine
3	Massachusetts
4	New Hampshire
5	Rhode Island
6	Vermont

Code	SMSA
1	Metropolitan - core city
2	Metropolitan - more than 50,000
3	Metropolitan - less than 50,000
4	Non-Metropolitan - more than 2,500
5	Non-Metropolitan - less than 2,500

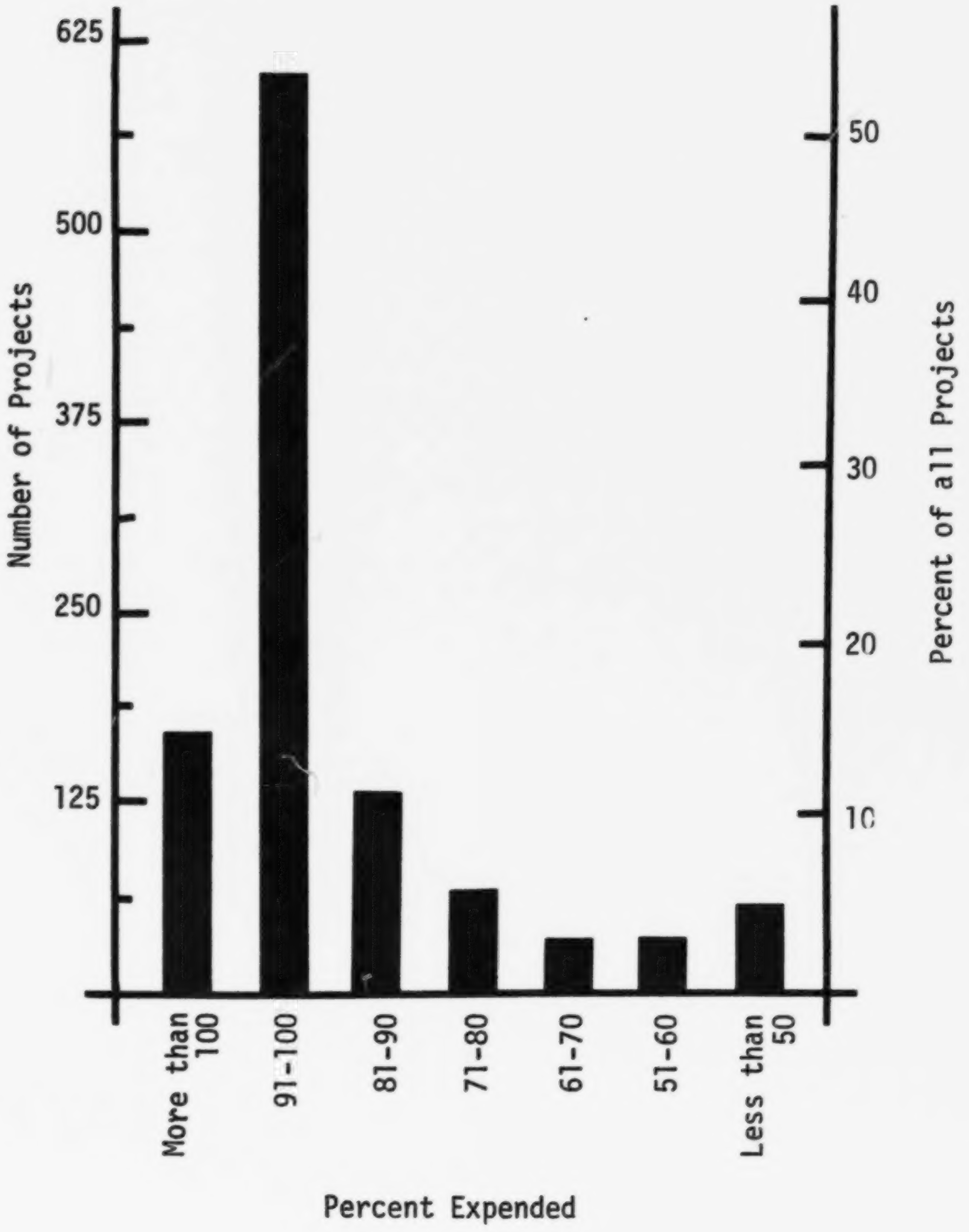
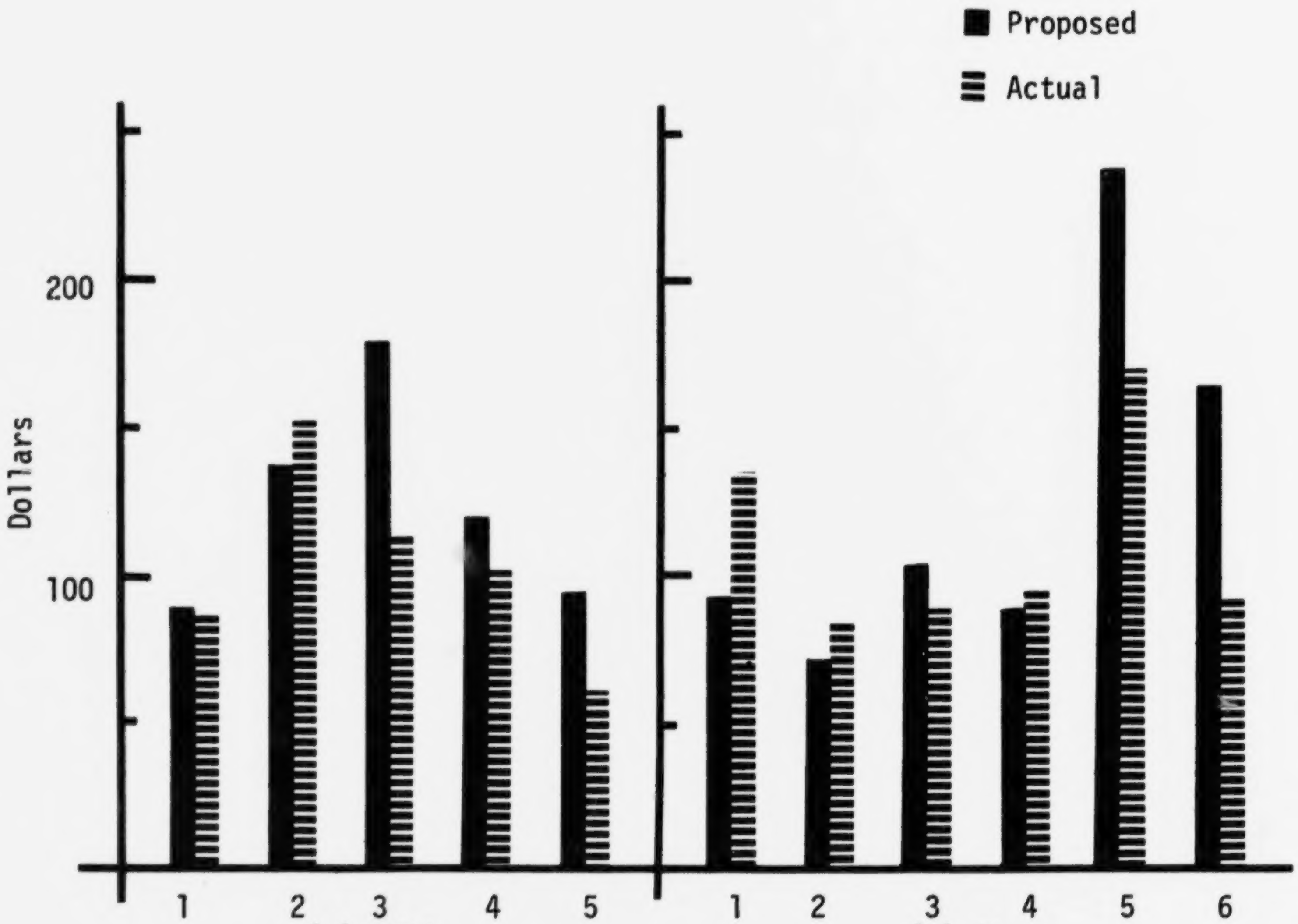


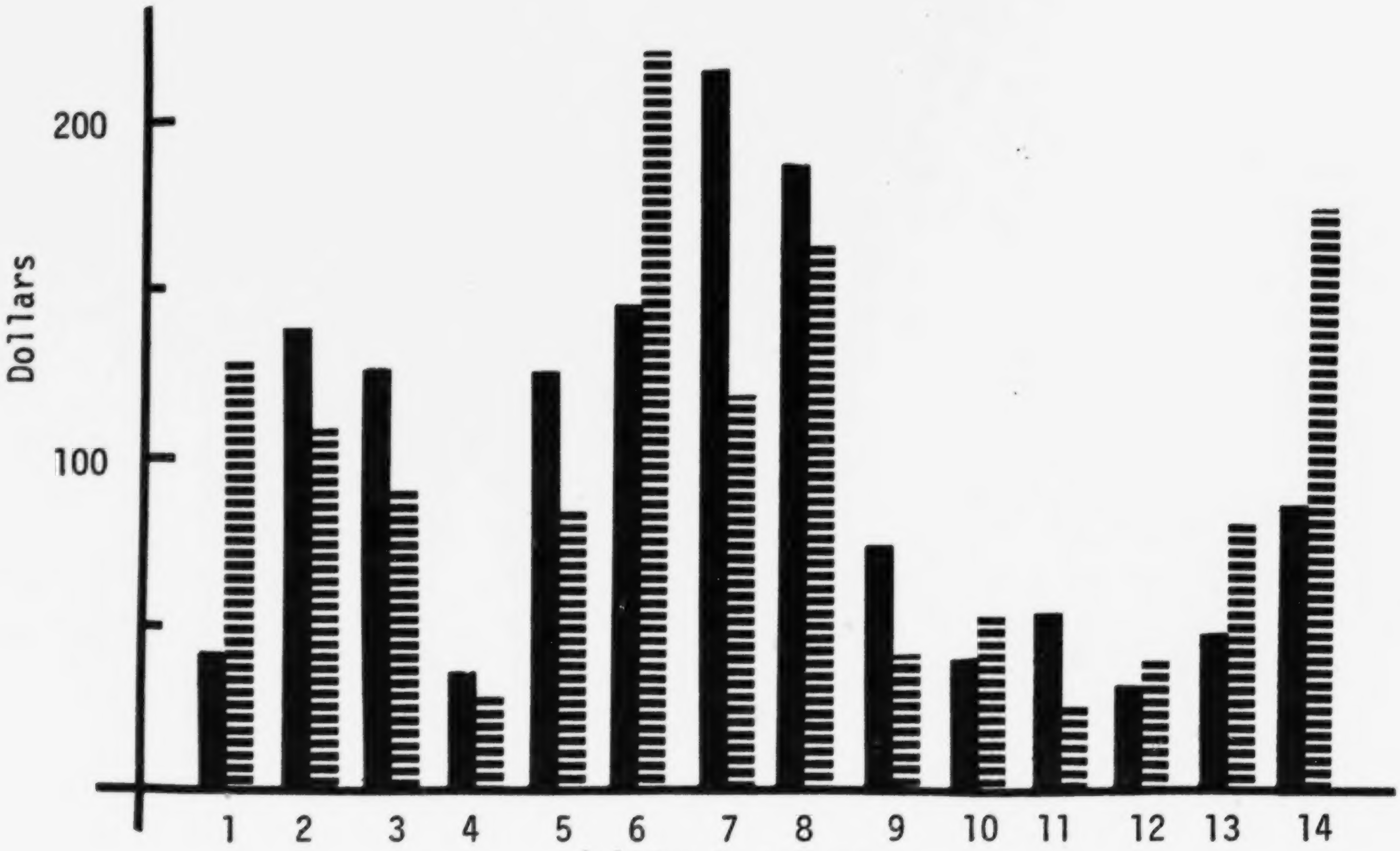
FIG. V.6 PERCENT OF MONEY APPROVED USED BY PROJECTS

No. of Projects = 1,098

FIG. V.7 MEAN EXPENDITURE PER PUPIL



(a) SMSA (b) State



(c) Project Type

TABLE V.4 MEAN EXPENDITURES PER PUPIL, PROPOSED AND ACTUAL

SMSA	PROPOSED EXPENDITURE PER PUPIL	ACTUAL EXPENDITURE PER PUPIL	DIFFERENCE
1	$ 90	$ 87	- 3
2	135	151	+16
3	180	112	-68
4	119	102	-17
5	95	66	-29
STATE			
Connecticut	$ 92	$132	+40
Maine	69	83	+14
Massachusetts	103	89	-14
New Hampshire	88	95	+ 7
Rhode Island	238	169	-69
Vermont	163	92	-71
PROJECT TYPE			
1	$ 41	$129	+88
2	137	107	-30
3	128	91	-37
4	33	28	- 5
5	128	85	-43
6	145	219	+74
7	215	117	-98
8	186	162	-24
9	73	41	-32
10	40	52	+12
11	53	24	-29
12	31	41	+10
13	48	82	+34
14	87	174	+87
OVERALL	$103	$102	- 1

largely account for the changes within the state and project type variables as well. "Academic Instruction" (#1), "Vocational" (#6), and "In-Service Training" (#14) projects showed the highest dollar increases betoween proposed and actual expenditures; project type #1 rose from $41 to $129, type #6 from $145 to $219, and type #14 from $87 to $147. The proposed enrollment data for groups #1 and #14, however, are suspect and may have distorted the proposed per pupil expenditure figures. In project type #1, where about half the projects were concerned with curriculum development, enrollment fell 73%. LEAs may have been overly optimistic or overly generous in recording the numbers of children to be immediately involved in these projects. For the project type #14, the number of actual participants dropped 77% from the anticipated, although only four (4) of the eleven (11) projects of this type reported any enrollment data. It appears that in these applications, the LEAs tended to record the students of teachers involved in in-service training as project participants, while in post-project evaluations they were more selective and may have more accurately reported only those students directly involved in project activities. For "Vocational" projects (#6) there are no obvious inaccuracies in the data that seem to be causing the sharp rise in per pupil expenditures. Projects of this type, spending an average of 95% of their initial budgets, had the highest utilization rate of any projects. Although they served 37% fewer students than proposed, this decrease is comparatively near the average decrease of 20% for New England.

V.3 BUDGET PATTERNS

The data on project expenditures broken down according to the account number code series stipulated in *Financial Accounting for Local and State School Systems* gives some indication of the types of expenditures made. The amount of money spent in an individual budget category suggests the degree of Title I fiscal impact upon that area of school operation; the number of projects making a certain expenditure suggests the local and state interpretations of where Title I funds could be useful in meeting educational needs. The information in Table V.5 illustrates that each budget category with the exception of construction was used by at least 3% of the projects. "Instruction," by far the most frequently used, involved 93% of the projects and accounted for 59% of all Title I expenditures. Salaries of any sort constituted 52% of the total disbursement. From these data, Title I funds appear to have made their greatest contribution in providing projects with staff time and added personnel. The second area of impact was in provision of equipment - generally such items as projectors, record players, reading machines, and other audio-visual machines. In the "Equipment" category 72% of the projects expended 22% of Title I funds. No other single category accounted for more than 4.6% of the money. "Instruction" and "Equipment" together make up 81% of the expenditures. Auxiliary services in "Health," "Transportation," and "Food Services" account for 6.2% of expenditures, although the percentages of projects using each of these categories are much higher (26%, 41%, and 21% respectively). The five categories most remote from immediate instructional benefits to students had a combined

TABLE V.5 PERCENTAGE DISTRIBUTION OF TITLE I EXPENDITURES

BUDGET CATEGORY	NO. AND PERCENT OF PROJECTS	TOTAL AMT. SPENT	PERCENT SPENT ON		PERCENT OF ALL TITLE I EXPENDITURES
			SALARIES	OTHER	
100 Administration	613 (48.0%)	$ 1,009,794	89.1%	10.9%	4.6%
200 Instruction	1188 (93.0%)	12,844,821	72.0	28.0	58.8
300 Attendance	56 (4.4%)	210,910	64.5	35.5	1.0
400 Health	335 (26.3%)	499,520	59.5	40.5	2.3
500 Transportation	528 (41.1%)	577,396	23.4	76.6	2.6
600 Operation	318 (24.9%)	169,334	50.1	49.9	0.8
700 Maintenance	217 (17.7%)	133,267	38.6	61.4	0.6
800 Fixed Charges	336 (26.3%)	190,903	6.1	93.9	0.9
900 Food Services	273 (31.4%)	287,592	16.0	84.0	1.3
1000 Student Body Activities	122 (9.6%)	110,316	34.7	65.3	0.5
1100 Community Services	39 (3.1%)	93,803	35.3	64.7	0.4
1220 Remodeling	178 (13.9%)	369,073	7.7	92.3	1.7
1230 Equipment	920 (72.1%)	4,874,389	2.7	97.3	22.3
Other	48 (3.8%)	182,549	34.2	65.8	0.8
1210A-1230 Construction	22 (1.7%)	276,475	-	-	1.3
Total	1276	$21,830,142	52.1%	47.9%	100.0%

TABLE V.6 PERCENTAGES OF PROJECTS PROPOSING AND EXPENDING FUNDS IN BUDGET CATEGORIES

1. BUDGET CATEGORY	2. PERCENT PROPOSING EXPENDITURES 1,302	3. PERCENT EXPENDING FUNDS 1,276	4. INCREASE OR DECREASE (Col. 3 - Col. 2)
100 Administration	47.0%	48.0%	+ 1.0
200 Instruction	91.2	93.0	+ 1.8
300 Attendance	3.6	4.4	+ 0.8
400 Health	24.7	26.3	+ 1.6
500 Transportation	38.6	41.4	+ 2.8
600 Operation	18.1	24.9	+ 6.8
700 Maintenance	12.8	17.0	+ 4.2
800 Fixed Charges	17.4	26.3	+ 8.9
900 Food Services	15.4	21.4	+ 6.0
1000 Student Body Activities	8.4	9.6	+ 1.2
1100 Community Services	3.2	3.1	- 0.1
1220 Remodeling	13.5	13.9	+ 0.4
1230 Equipment	68.9	72.1	+ 3.2
Other	26.2	3.8	-22.4
1210A-1230 Construction	4.3	1.7	- 2.6
SALARIES	92.2	90.6	- 1.6
NON-SALARY	88.0	94.5	+ 6.5

expenditure of 5.3% of the total. These categories were "Plant Operation," "Maintenance," "Fixed Charges," "Remodeling," and "Construction." Although Title I expenditures were heavily concentrated in instruction and supporting equipment, it is interesting to see that Title I funds proved useful even in those budget areas of school operation that are relatively peripheral to instructional services.

Application data on proposed budgets were not accurate enough to permit comparison of anticipated and actual expenditures within budget categories, but the percentages of projects planning and finally spending Title I funds in the various areas were examined. As Table V.6 indicates, the operation of projects changed the proposed spending patterns markedly little. This suggests that budget planning, at least by the broad categories, proved quite accurate. Generally, there was no more than 4% variation between the ways projects originally budgeted and finally spent their funds. The only major shift was the decrease in the "Other" category. During implementation most of the projects that initially budgeted in this category appear to have reapplied their money to one of the more clearly defined categories. Most other categories did in fact increase slightly. The highest increases were in the areas of "Plant Operation" (+6.8%), "Maintenance" (+4.2%), "Fixed Charges" (+8.8%), "Food Services" (+6.0%), and in overall "Non-Salary" expenditures (+6.5%). There were small *decreases* in the percentages of projects actually spending money in two budget categories, "Construction" (-2.6%) and "Community Services" (-0.1%) and in the percentage using Title I funds for "Salaries" (-1.6%).

CHAPTER VI

FINDINGS: PROJECTS OPERATED BY INSTITUTIONS FOR HANDICAPPED CHILDREN

The ESEA Title I legislation was ammended by Public Law 89-313 to provide that state education agencies also receive funds to conduct programs for mentally and physically handicapped children enrolled in state-supported institutions. The formula for allocation of funds to these special state schools is based upon all handicapped children for whom a state offers free public education. This number is multiplied by one-half the average per pupil expenditure in the state for the second preceding year. (Thus, in the case of FY66 grants, the FY64 state average per pupil expenditure was used.) The total amount available to the state agency for expenditure in its special schools is then distributed according to the enrollments in these schools. Title I project plans and project proposals are prepared by the school administrative staff and the state education agency.

The six state Title I offices provided the NEEDS project with varying amounts of information on sixty-one such projects conducted by state-sponsored institutions during FY66. The data included sixty-one project applications, twenty-one project fiscal reports and twenty-five evaluation reports. Complete sets of all three documents were obtained for only fourteen projects.

VI.1 PROPOSED ENROLLMENTS AND EXPENDITURES

The children served by FY66 Title I projects in state institutions have been grouped into five major categories reflecting the frequency of the Title I projects in schools serving similarly handicapped children. These five groups and the number of institutions and projects for each group are presented in Table VI.1.

These sixty-one projects proposed to serve 4,971 handicapped children. The projects were granted a total of $908,612 in Title I funds, an average of $14,895 per project and $182.11 per pupil. The range in requested budgets was from $512 to $69,973. The proposed student enrollment in projects ranged from 4 to 433. There were however two projects devoted solely to staff training and therefore included no students as project participants. Table VI.2 indicates, by institution type, the proposed project enrollment and expenditure patterns as reported in the application forms.

TABLE VI.1

STATE INSTITUTIONS AND NUMBERS OF THE TITLE I PROJECTS

TYPE	INSTITUTIONS	FY66 TITLE I PROJECTS
Emotionally Disturbed	20	21
Mentally Retarded	12	16
Deaf	9	11
Blind	4	5
Other:	8	8
Cerebral Palsy	(3)	(3)
General Rehabilitation	(1)	(1)
Crippled	(2)	(2)
Perceptually Handicapped	(1)	(1)
Speech	(1)	(1)
Total	53	61

TABLE VI.2 PROPOSED ENROLLMENT AND EXPENDITURE PATTERNS FOR TITLE I PROJECTS IN INSTITUTIONS FOR HANDICAPPED CHILDREN

	EMOTIONALLY DISTURBED	MENTALLY RETARDED	DEAF	BLIND	OTHER	TOTAL
NUMBER OF PROJECTS	21 (34.4%)	16 (26.2%)	11 (18%)	5 (8.2%)	8 (13.1%)	61 (100%)
PROPOSED PARTICIPANT STUDENTS	616 (12.4%)	2407 (48.4%)	1538 (30.9%)	249 (5%)	161 (3.2%)	4971 (100%)
AVERAGE PROJECT ENROLLMENT	29	150	140	62 (4 projects)[1]	23 (7 projects)[1]	84 (59 projects)[2]
TOTAL FUNDS APPROVED	$146,986 (16.2%)	$357,570 (39.4%)	$306,158 (33.7%)	$65,382 (7.2%)	$32,517 (3.6%)	$908,612 (100%)
AVERAGE PROPOSED BUDGET	$6,999	$22,348	$27,833	$13,076	$4,065	$14,895
AVERAGE PROPOSED EXPENDITURE PER PUPIL	$239	$149	$199	$258[1]	$188[1]	$182[2]

[1] One project was for staff only.
[2] Two projects were for staff only.

VI.2 PROJECT ACTIVITIES

Each state school Title I project was classified according to the major focus of the project. It had been our initial assumption before reviewing actual project data that the projects undertaken for handicapped children might be sufficiently different from LEA-operated projects to warrant a different classification system. Examination of the project data provided by the state institutions proved contrary to our expectation. The types of activities described indicated that the compensatory educational needs of handicapped children in special schools were strikingly similar to those identified for the more general population of "educationally deprived" children. Rather than focusing technically or medically upon a particular handicap-related problem, the projects were concerned with remedial needs in a variety of more conventional subject and activity areas. As a result, the major project type categories designed for LEA projects were also useful for classifying the state school projects. The underlying assumption, of course, is that these activities were adapted appropriately to the specific disabilities of the project participants. The two modifications in the original system are: (1) the formerly separate "Reading" category has been combined with "Language Arts" for more efficient grouping; and (2) some major project types have been more narrowly defined in the following list to be specific about the few projects they include.

PROJECT TYPES FOR STATE INSTITUTION PROJECTS

CURRICULUM DEVELOPMENT: Projects concerned with research in and/or development of curricula.

LANGUAGE ARTS & READING: Projects in reading, speech, and general language arts training.

INSTRUCTIONAL SERVICES: Tutoring projects.

GENERAL REMEDIAL: Programs primarily academic in focus but providing several rather than one field of concentration so that no one activity could be isolated as central. Guidance was often one of the activities provided.

VOCATIONAL TRAINING

SCHOOL READINESS: For children of pre-school age, projects focusing on preparation for school.

EQUIPMENT: Projects utilizing Title I funds primarily to purchase teaching equipment.

GUIDANCE AND PSYCHOLOGICAL SERVICES: Projects that had guidance services as the major activity. This group also includes parent counseling and diagnosis of individual problems.

HEALTH SERVICES: Projects focusing upon the health of student either by providing medical services or physical education training.

LIBRARY SERVICES

CULTURAL ENRICHMENT: General programs of a non-academic nature designed to provide enrichment through field trips, recreation and other socializing activities, such projects often taking place in summer school or camp and frequently including some guidance and counseling services.

IN-SERVICE TRAINING: Projects focusing upon staff improvement.

TABLE VI.3
DISTRIBUTION OF PROJECTS BY PROJECT TYPE IN STATE SPONSORED INSTITUTIONS

	EMOTIONALLY DISTURBED	MENTALLY RETARDED	DEAF	BLIND	OTHER	TOTAL	PERCENT
CURRICULUM DEVELOPMENT	1	1	1	1		4	6.6
LANGUAGE ARTS	2	4	3		1	10	16.4
INSTRUCTIONAL SERVICES					1	1	1.6
GENERAL REMEDIAL	3	2	3	2	3	13	21.3
VOCATIONAL TRAINING	2	1				3	4.9
SCHOOL READINESS		3				3	4.9
EQUIPMENT	1					1	1.6
GUIDANCE AND PSYCHOLOGICAL SERVICES	4	2	1	1		8	13.1
HEALTH SERVICES	2	1	1			4	6.6
LIBRARY SERVICES				1		1	1.6
ENRICHMENT	6	2	1		1	10	16.4
IN-SERVICE TRAINING			1		2	3	4.9
TOTAL	21	16	11	5	8	61	100.0

The distribution of projects by project type in the fifty-three state institutions is presented in Table VI.3. This distribution is compared to that found for all LEA-sponsored projects in Figure VI.1. The most outstanding differences between the two groups are that the state institutions had lower percentages of language arts and general remedial projects and higher percentages of projects devoted to guidance services, library services, and enrichment activities. It should be noted that these categories simply indicate the major focus of projects; many state institution projects included guidance and counseling services as a minor project component.

VI.3 POST-PROJECT ACTIVITIES

The information on what in fact took place in these projects is limited by the number of final evaluation and fiscal reports available. Complete sets of pre- and post-project information were obtained for only 23% of the sixty-one projects. There were evaluation reports for only 40% and fiscal reports for only 34%. As a result, the statistics on actual expenditures and actual enrollments are based upon a much smaller number than the initial number of approved projects. All comparisons between the proposed and the actual were made upon only those projects for which there were data both on what was proposed and on what actually occurred. Since this sample is so small, it would be dangerous to assume that the results are representative of the sixty-one state-institution projects.

For those projects reporting sufficient information, Tables VI.4 and VI.5 indicate how post-project enrollments and expenditures compared with initial plans. The trend for these projects was to serve fewer students and utilize less money than originally proposed. The only exception in this sample is found in projects for the emotionally disturbed. These five projects reported a substantial increase in the number of student participants.

Table VI.6 compares the enrollment and expenditure patterns for LEA-operated projects with those for state-supported institutions. For most items, this table is self-explanatory, and the results are not particularly noteworthy. It is significant, however, that the state-supported institutions proposed a much higher Title I per pupil expenditure for their projects than did the LEAs. This 75% increase over what the LEAs proposed seems in keeping with the unique function of the state-supported schools. Children in these schools have specific disabilities severe enough to require their isolation from public school classes and to necessitate specialized instruction and supervision. The costs of educating these children are considerably higher than the costs for more normal children. Twenty-four (24) of the 53 state-sponsored institutions that conducted Title I (313) projects

FIG. VI.1 PERCENTAGE COMPARISON OF LEA SPONSORED PROJECTS AND STATE INSTITUTION PROJECTS

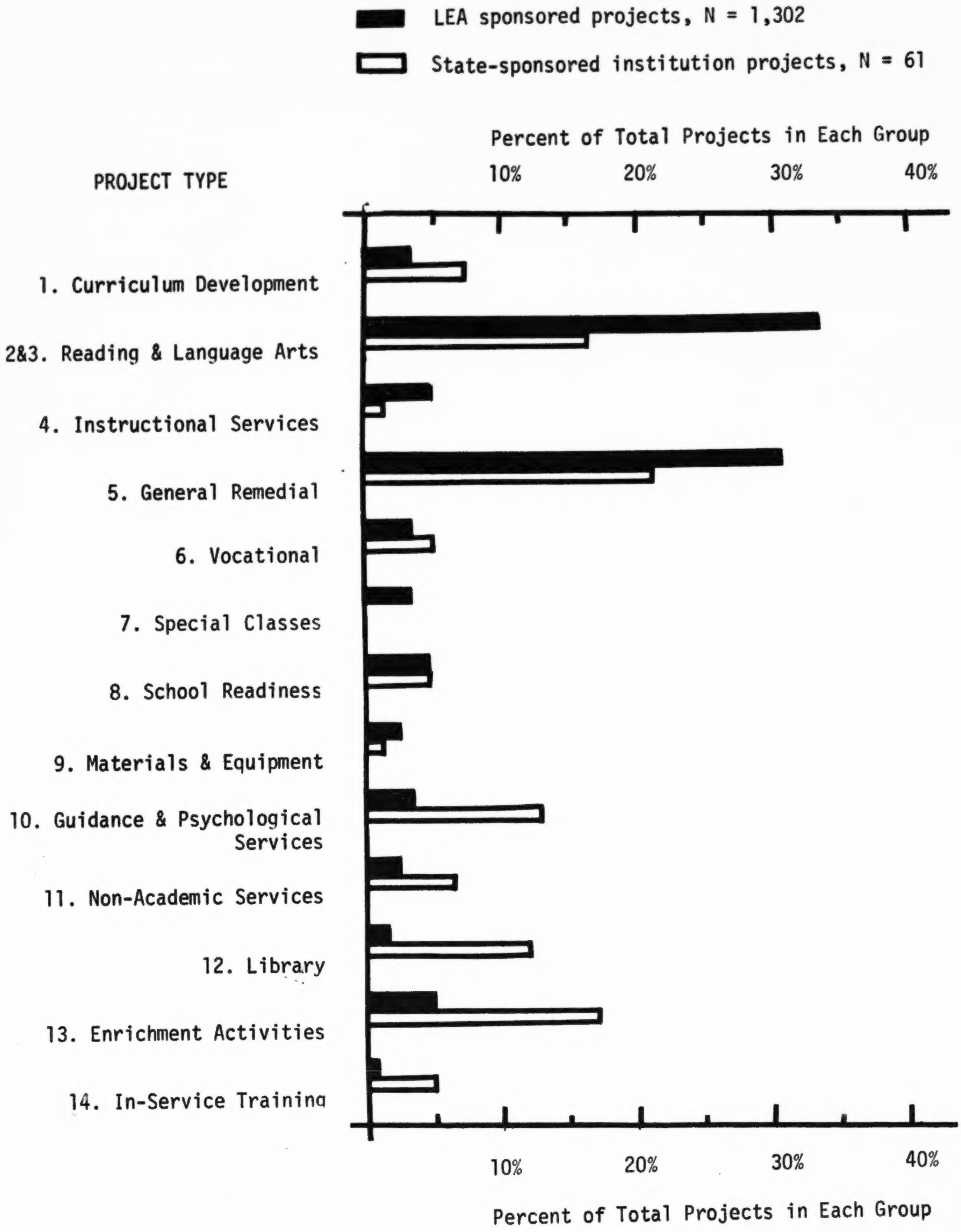


TABLE VI.4
A COMPARISON OF PROPOSED AND ACTUAL PROJECT ENROLLMENTS

	EMOTIONALLY DISTURBED	MENTALLY RETARDED	DEAF	BLIND	OTHER	TOTAL
NUMBER OF PROJECTS REPORTING	5	11	3	3	5	25
AVERAGE STUDENTS PER PROJECT						
ACTUALLY PARTICIPATED	36	131.6	114	22	27.4	85.1
PROPOSED	27.2	171.4	146.7	30	27.8	105.2
PERCENT OF PROPOSED STUDENTS ACTUALLY PARTICIPATING	132.4%	76.8%	77.7%	73.3%	98.6%	80.9%

TABLE VI.5
PERCENTAGES OF REQUESTED FUNDS ACTUALLY USED

	EMOTIONALLY DISTURBED	MENTALLY RETARDED	DEAF	BLIND	OTHER	TOTAL
NUMBER OF PROJECTS REPORTING	3	9	4	0	5	21
PERCENT OF REQUESTED FUNDS ACTUALLY USED	84.5%	72.2%	89.4%	-	94.8%	76.5%

TABLE VI.6

A COMPARISON OF ENROLLMENT AND EXPENDITURE PATTERNS BETWEEN LEAS AND INSTITUTIONS FOR HANDICAPPED CHILDREN

	LEAS	STATE-SPONSORED INSTITUTIONS	TOTAL
NUMBER OF PROJECTS*	1302 (95.5%)	61 (4.5%)	1363 (100%)
PROPOSED NUMBER OF PUPIL PARTICIPANTS*	260,195 (98.1%)	4971 (1.9%)	265,166 (100%)
TOTAL FUNDS APPROVED*	$31,498,020 (97.2%)	$908,612 (2.8%)	$32,406,632 (100%)
AVERAGE PROPOSED EXPENDITURE PER PUPIL	$103	$182	
PERCENTAGE OF PROPOSED NUMBER OF STUDENTS ACTUALLY SERVED**	81.1%	80.9%	
PERCENTAGE OF APPROVED FUNDS ACTUALLY UTILIZED**	79.8%	76.5%	

* Based on applications data for all projects for which money was approved.

** Based on information about only those projects for which complete data was available.

provided data on 1965-66 expenditures per pupil. The average institution expended $1,576 per pupil from non-Federal funds while the comparable average for New England LEAs participating in Title I was $423. The per pupil expenditure range for the state-sponsored institutions was from $235 to $8,148; the median was $1,082. It is not unreasonable that this pattern should also be reflected in the use of Title I funds and that state-sponsored institutions for handicapped children should have proposed considerably higher per pupil expenditures for their project participants than the local education agencies.

CHAPTER VII

FINDINGS AND RECOMMENDATIONS CONCERNING EVALUATION

The present phase of the NEEDS Title I study has served as the groundwork for Phase II, the actual evaluation of Title I impact upon disadvantaged children. The extensive data collection and analysis conducted during this part of the study have offered information critical to developing and implementing a program for evaluation. The census of all Title I projects conducted during the program's first year of operation has provided a framework within which to proceed in selecting a representative sample of the population. It has indicated the quality and variety of data transmitted in Title I report forms by the schools to the state departments of education and the administrative procedures for collecting these data. It has also permitted some exploration of the variables that could be relevant to program evaluation. Finally, it has enabled identified specific areas of difficulty that accompany the task of regional program evaluation.

VII.1 PROBLEMS IN DATA AND DATA AVAILABILITY

It is essential to the conduct of either a descriptive study of Title I program or an evaluation of its impact that the original data used be both appropriate and reliable. The current phase of the NEEDS study has found that the information now being collected in Title I related documents does not meet either qualification. The description of FY66 activities presented in Chapters III through IV has been severely restricted by data problems; the particular limitations in specific items are discussed in these chapters themselves. The task of program evaluation is even more difficult than that of description when data on projects and students are unreliable. A major concern of Phase I of this study has therefore been the appraisal of Title I data and data availability. Most problems in obtaining appropriate information are caused either by relying upon the LEAs for the information or by the Title I forms themselves.

VII.1.1 Locally Supplied Data

Using data supplied by the schools on forms and questionnaires did not furnish reliable Title I information. Because forms were mailed back and forth between the state departments and the schools, there could be only minimal supervision of how they are filled out. The data had to be taken at face value; obvious inaccuracies could be corrected, but it was not possible to validate information that appeared questionable. Most forms contained questions that were not highly structured or explicit enough to avoid misinterpretation and therefore did not get the desired responses. Then, too, the Title I application and evaluation forms themselves were long and rather complicated. Some information, such as past attendance and drop-out rates, numbers of staff in various activity areas, and number of project hours per student, was probably difficult for LEAs to locate or calculate and so was frequently not supplied. Finally, the large number of forms that the LEAs were asked to complete probably in itself reduced the thoroughness and seriousness with which they attended to any one form. During the first year of Title I particularly, the LEAs were asked for data regarding project activities not only by the state departments of education but also by a number of official and private evaluation studies. These forms undoubtedly became impositions, especially when they duplicated requests for the same information.

VII.1.2 The Data Collection Instruments

Title I data collection instruments - the basic data and application forms and the final fiscal and project evaluation reports - as they are presently designed, considerably restrict the amount of useful data available for program description or analysis. Many particular problems in FY66 forms have been discussed earlier in this report. Chapter II, "Procedures," reviews the limitations in relying on the present instruments for accurate information and outlines the difficulties in obtaining comparable data, particularly from the six non-comparable project evaluation reports used by the six New England states. Chapters III through VI discuss limitations in specific items of information and indicate missing data that would have been valuable for the documentation of Title I activities. Since the first year of Title I, these forms have been revised. The Federally issued basic data and application forms have been substantially redone so that they are now both more informative and less complicated. Several of the states too have altered the format of their post-project evaluation report forms so that the data collected within these states is more useful, at least at the state level. Because the content of the forms has been undergoing change, the recommendations offered in this section are addressed to the approach to Title I data collection rather than to specific items of information, although specific examples are used as illustrations.

Comparability of Forms

The most obvious difficulty in dealing with the present set of Title I forms for projects in more than one state is that the state-designed documents do not provide similar data. Comparability is not a problem in the basic data and application forms because these are Federally prescribed. Yet, both the project evaluation reports and, to a lesser extent, the fiscal reports are designed at the state level and are somewhat different for each state. Although the fiscal reports are based upon standard budget categories from *Financial Accounting for Local and State School Systems*, they did vary slightly in format. For FY66, the major difficulty in the fiscal report data was that while five of New England state report forms gathered budgetary information by individual project, the sixth collected the data by LEA without breaking out expenditures for individual projects within an LEA. The project evaluation reports, however, differ so greatly in substance that for New England there are few items of data gathered in common by all six states. Since information on project results and actual expenditures is essential even to a descriptive survey of the impact of Title I, it is unfortunate that these potentially informative documents, particularly the evaluation reports, are relatively useless beyond the state level. It is particularly incongruous that the basic data and application forms should be uniform while the follow-up reports are so various.

In order to facilitate data collection and to avoid the current duplication of effort in designing forms, it seems essential that all Title I data collection instruments be standardized and issued by the United States Office of Education. Common evaluation and fiscal reports prepared by the USOE could be easily ammended at the state level before distribution to the LEAs to include any additional information desired by a particular state department. The basic documents, however, would provide common data on all LEAs and all projects involved in the Title I program. The USOE would be able to draw a more complete picture of the national operation of Title I than is now possible, and the states would be able to compare their own Title I activities with those of other states.

Internal Compatibility

Standardizing all the Title I data collection instruments would provide opportunity to eliminate a second weakness in the present set of forms. As they are now designed, there is little relationship between the items of data initially collected in the basic data and application forms and those collected later in post-project evaluation reports. It seems advisable that there be basic compatibility between the information gathered on proposed project activities and that collected after actual implementation of project plans. Yet, the set of four Title I instruments does not provide adequate material for historical documentation of *individual* projects, let alone state or regional program description or evaluation. At present, for the New England states, even such fundamental information as the number and types of children participating in Title I projects is generally not collected to permit comparison between the numbers proposed in the applications and those reported in the post-project evaluations. This problem in internal compatibility is compounded by the differences in the six versions of evaluation report forms so that for the region nearly every item of quantifiable data is affected. Information on staff involved in a project, if required at all, is requested in summary form, and cannot be compared to the staff activity assignment categories of the application form. Most evaluation forms had no provision for reporting on project activities themselves; a shift in the originally planned focus of a project could go undetected. Finally, such things as duration and intensity of project activities are requested in substantially different ways making it impossible to compare the proposed with the actual operation of a project. If the evaluation report forms were designed to relate directly to the content of the basic data and application forms, more accurate and meaningful data on the impact of Title I would be available.

The Content of Post-Project Reports

The implication of revising the evaluation forms to be both nationally standard and compatible with other Title I data collection instruments is that the content of the evaluation reports also be reconsidered. At present, the term "evaluation report" is a misnomer, more likely to salve consciences than to describe the function of these documents. They provide little quantitative data for statistical description - let alone statistical evaluation. Most of the items are cast as open-ended questions requiring narrative response. In order to locate a specific piece of information, it is often necessary to read through an entire project report; even then, the data may not be present. The report formats generally become more tightly organized and specific in the sections requesting results of testing programs. Yet, except as it indicates that a project did attempt to conduct objective evaluation, this information is relatively useless. There is no assurance that the data itself has been accurately obtained. But more importantly, even if there had been, test results from projects with little similarity in purpose or substance cannot be meaningfully combined to contribute to a more general program evaluation.

Coordination of the post-project reports with the other Title I documents suggests certain revisions in their structure:

1. Narrative response items should be reduced to a minimum. Generally these items do not yield comparable information even for projects using the same state form. Provision for some narration might be retained so that those state departments with sufficient staff to follow up individual reports on unusual problems and project activities could obtain information that might be difficult to gather

on a tightly structured form. For most items, however, there has been enough experience with Title I to anticipate the most likely types of responses and to structure questions accordingly.

2. Requests for quantitative and descriptive statistical data. should be framed in concise format, much as they are in the application forms. Pre-coded responses and check lists would provide more accurate and more easily accessible data than open-ended questions.

3. Finally, certain requests could be eliminated entirely from the post-project report forms. Some items of data now collected, such as test scores and staff social security numbers, are relatively useless because they do not contribute information for program description or assessment. Other theoretically useful items, such as requests for drop-out rates and attendance data for past years, are, in practice, of little value. Because LEAs cannot easily obtain the appropriate information to complete these requests, they are often left blank or answered with inaccurate data. It seems unnecessary to continue to gather these types of information for all Title I projects. Intensive study of a sample of projects in a thorough evaluation program would include collection of accurate test data and attendance rates for a sufficient number of projects to permit some generalization of the findings.

VII.2 REPORTS ON LOCAL EVALUATION OF PROJECTS

The NEEDS study examined the evaluation report forms and the data they supplied in particular detail since our interest was in preparing for our Phase II evaluation design. The six versions of evaluation report forms used in New England to varying degrees collected four types of information directly concerned with project evaluation.

1. Anecdotal descriptions and subjective appraisals of project success.
2. Descriptions of the approaches and methods used in project evaluation (research design, tests used, etc.).
3. Quantitative data on indirect indices of changes in student behavior patterns (drop-out rates, attendance).
4. Quantitative data on the project group scores on pre- and post-test administrations.

VII.2.1 Subjective Appraisals

The first type of information, *the subjective appraisals, proved* relatively useless and were not used in the NEEDS analyses. The narrative descriptions could not be made comparable for quantitative analysis. The standard format rating scale for project success, recommended by the USOE and adopted by four of the states, also provided information too subjective to be meaningful. The scale as it appeared in the USOE format for state reports is presented as Figure VII.1.

FIG. VII.1

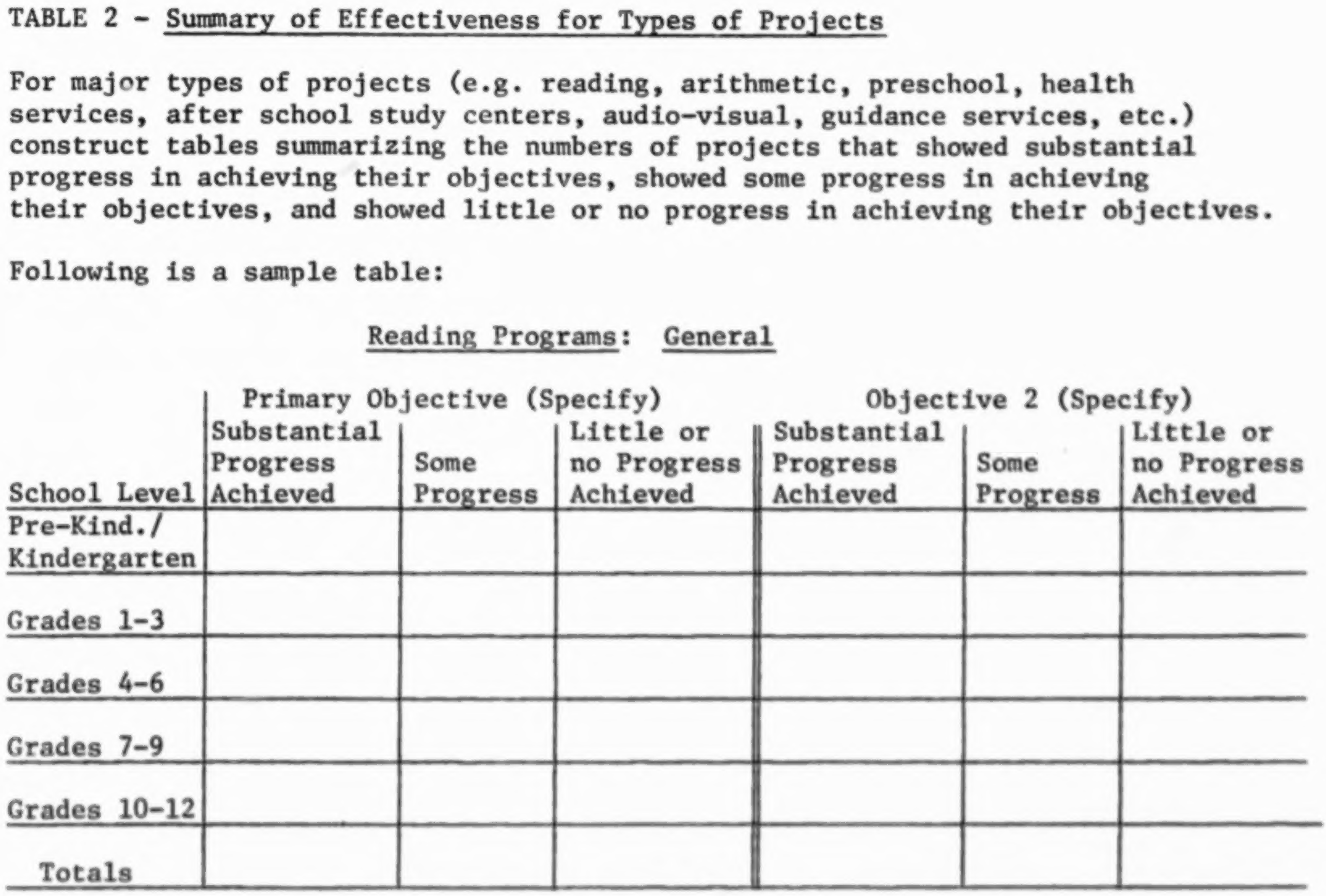


TABLE 2 - Summary of Effectiveness for Types of Projects

For major types of projects (e.g. reading, arithmetic, preschool, health services, after school study centers, audio-visual, guidance services, etc.) construct tables summarizing the numbers of projects that showed substantial progress in achieving their objectives, showed some progress in achieving their objectives, and showed little or no progress in achieving their objectives.

Following is a sample table:

Reading Programs: General

	Primary Objective (Specify)			Objective 2 (Specify)		
School Level	Substantial Progress Achieved	Some Progress	Little or no Progress Achieved	Substantial Progress Achieved	Some Progress	Little or no Progress Achieved
Pre-Kind./ Kindergarten						
Grades 1-3						
Grades 4-6						
Grades 7-9						
Grades 10-12						
Totals						

One of the four states asked that the total project rather than the project's specific objectives be rated. One requested appraisal of all objectives rather than just the primary and secondary ones. Only one requested the information by grade level, following the USOE form item exactly. Not only was this item useless for individual projects, it was also not comparable among projects.

VII.2.2 Evaluation Designs

Some descriptions of the methods and research designs used to evaluate projects, however, were requested in check list form that did supply more useful quantifiable and comparable responses. Again, this item presented as Figure VII.2 is from the USOE state report form; its substance was adopted by five of the six states.

FIG. VII.2

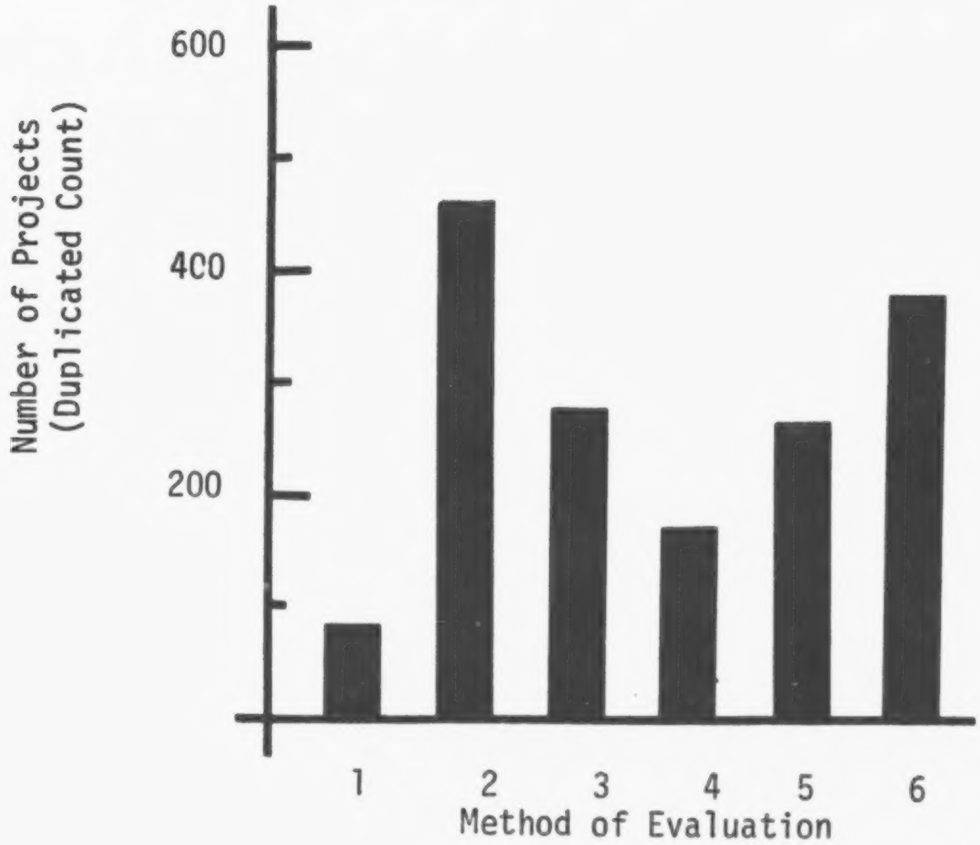
How many projects employed each of the following evaluation designs?

Number of Projects	Evaluation Design
88	Two group experimental design using the project group and a conveniently available non-project group as the control.
464	One group design using a pretest and posttest on the project group to compare observed gains or losses with expected gains.
276	One group design using pretest and/or posttest scores on the project group to compare observed performance with local, state, or national groups.
175	One group design using test data on the project group to compare observed performance with expected performance based upon data for past years in the project school.
266	One group design using test data on the project group, but no comparison data.
377	Other (Specify)

Four states worded the request to ask only the number of projects in each LEA using each method. Two states requested that the projects be specifically identified by project number. Only one asked that just one method be assigned to each project; the other four permitted a duplicated count and a project could be placed in more than one of the six design categories. Figure VII.2 includes the number of projects reported as using the six options. Since this is usually a duplicated count, Figure VII.3 illustrates the distribution of project responses among these six methods and then presents an unduplicated count of the most frequently reported method or combination of methods.

The descriptions offered in the check list are ambiguous. Item #1 is a valid design but does not specify whether objective or subjective measures were used in the comparison. Although 464 projects reported that they used Item #2 ("Pre- and post-test comparison on project group only"), they were not asked to indicate whether locally designed or standard tests were used in these testing programs. Unless they reported the name of the tests elsewhere in the report, there was no way to determine what type of tests were used. Then too, this item does not indicate how "expected gains" were established. Item #3, "Pre- and/or post-test compared to local, state, or national groups," would appear to be the most valid of the design methods listed except that the "and/or" option allowed projects that administered only pre-tests or more likely, only post-tests to respond to this item. Item #4 does not specify whether testing included both pre- and post-test administrations. It could be interpreted as a sub-division of item #2 or #3, or it could mean that only post-testing took place and the results compared to previous post-tests in the project school. This alternative raises the problem of which students from past years were compared to the current project group. Since Title I project children are generally at the low end of the achievement scale, their expected performance can only be based upon the performance of *comparable* students in previous years. Item #5 provides a strange option. If pre- and post-tests were

FIG. VII.3 METHODS OF EVALUATION



METHODS OF EVALUATION

1 = Project group and non-project (control) group
2 = Pre- and post-test comparison on project group only
3 = Pre- and/or post-test compared to local, state, or national groups
4 = Test data from project group compared with test data from previous years in project school
5 = Project group tested but no comparison data
6 = Other

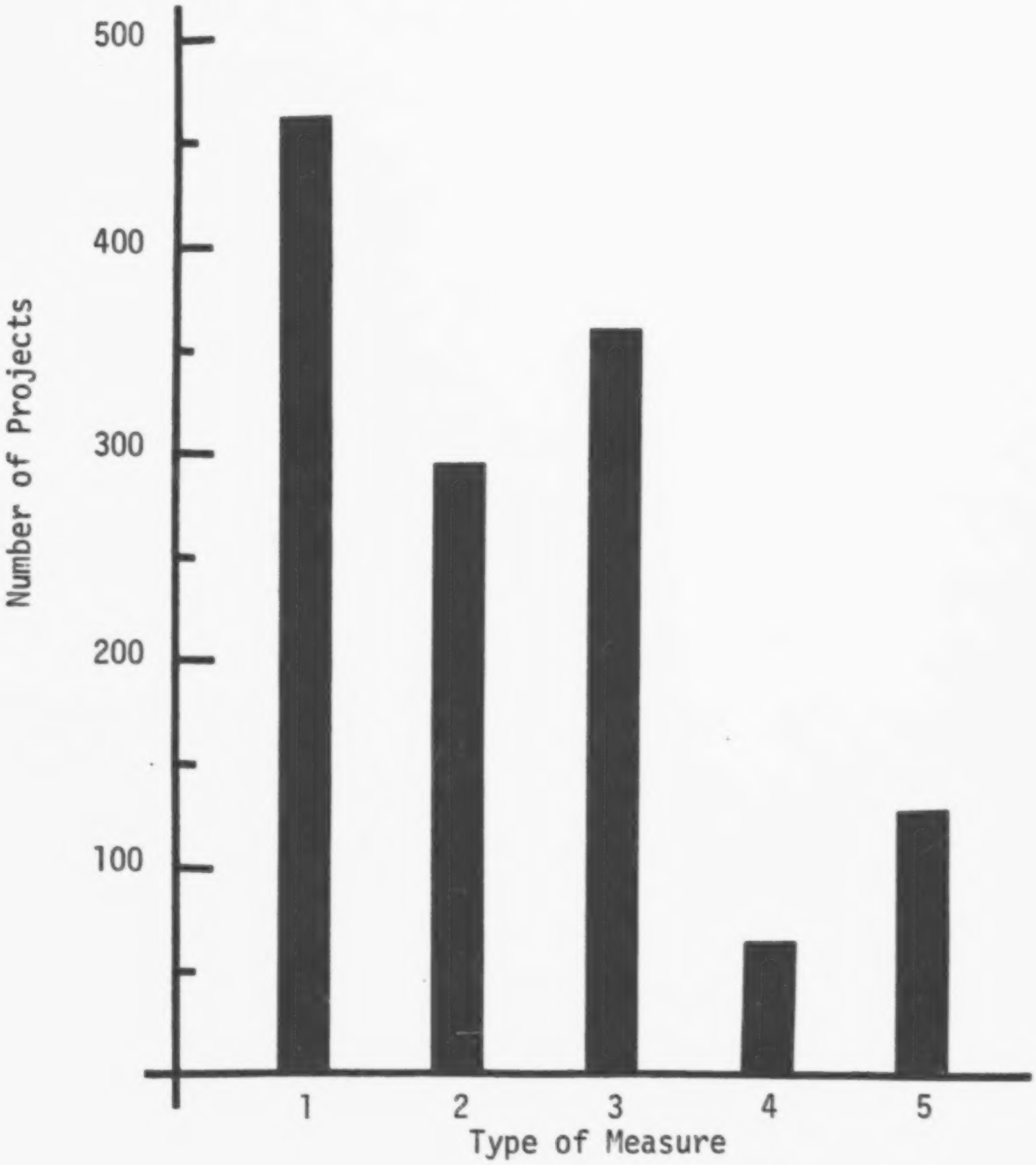
MOST FREQUENT METHODS USED

No evaluation method reported:		202 projects
Method 6	only	192
2	only	189
5	only	116
3	only	71
2&3		50
4	only	39
5&6		37
2&6		32
2&5		29

(Total no. projects = 1,306)

FIG. VII.4 TYPES OF MEASURES USED (Evaluation Data)

N = 1,306



TYPES OF MEASURES

1. Measures other than tests - teacher ratings, anecdotal ratings, observer reports, etc. (N = 461)
2. Other measures and standardized tests (achievement, intelligence, aptitude, interest, attitude). (N = 293)
3. Standardized tests only (N = 360)
4. Locally constructed tests only (N = 65)
5. Standard and local tests primarily (N = 127)

used why was no comparison made. If only one or the other was used and not compared to local expectations or standard norms, the isolated scores for the project group would be meaningless. The "Other" category, item #6, yielded too many different responses to be useful.

To get a picture of the types of measures used by the projects in their local evaluations, the NEEDS study assigned each project to one of the five exclusive categories on the basis of information found in its evaluation report. Each report had to be read thoroughly since the appropriate information was frequently scattered throughout and presented in narrative form. All 1306 projects provided were classifiable according to these five groups. Figure VII.4 presents an unduplicated count of their distribution according to measures used. Four hundred and sixty-one (461) projects, 35% of the total, did not use any testing to evaluate project activities at the local level. The 780 projects in categories #2, #3, and #5 all used standard tests as at least part of their assessment programs; yet, in the reports, less than 10% of these projects actually provided meaningful data on the results of pre- and post-test administrations.

VII.2.3 Indirect Measures

Indirect indicators of the effects of Title I activities on student behavior and attitude toward school were collected in three areas: 1) Drop-out rates, 2) Average Daily Attendance and Average Daily Membership rates, and 3) Percentage of students continuing education after high school. Generally this information proved unsatisfactory; for each item only three of the six state reports collected data (although the items were sometimes omitted because state departments could get the information from its own records). Response rates in these three states were low. Finally, these types of information require longer historical documentation for any one or two year's results to become meaningful.

Only three of the state reports collected drop-out data. One requested the information for the entire school system without isolating Title I project schools, and this data was only requested for the 1965-66 school year. Of the other two, one collected data for the 1964-65 and 65-66 school years for both Title I and non-Title I schools and the other collected the same information dating back to the 1963-64 school year.

Average Daily Attendance and Average Daily Membership information was requested by two of the state reports. In both cases the data were collected for each grade as far back as the 1963-64 school year and information from Title I and non-Title I schools reported separately. These two items suggest that collecting this information in this matter from the LEAs is not fruitful. Many LEAs provided the information for 1965-66 school year but omitted earlier data. Although the LEAs undoubtedly have records of the information, the necessary effort to gather the information together for presentation in the prescribed format may have appeared unnecessary.

Report on percentages of students continuing education after high school were made in three of the states. In keeping with the USOE request, these states collected the percentages of students continuing study after high school within each of their Title I schools.

At present these data are not particularly useful except as baseline information. Trends cannot be noted until the information is available for more years and to discern the role of Title I in any changes of pattern will require consideration of other environmental influences as well.

VII.2.4 Data on Testing

In order to explore both the quantity and quality of specific test data reported by the LEAs and to experiment with procedures for analyzing these data to assess the impact of specific variables upon behavioral changes in Title I participants, the NEEDS study organized a series of step-wise and multiple correlation analyses. These statistical procedures "explain" the variation in a dependent variable by means of a set of independent variables. They permit measurement of the contribution made by each of a number of variables in explaining the variance in the dependent and yield a total of the variation in the dependent variable.

It was evident from the start of the project that data from FY66 Title I documents were both insufficient and inappropriate for actual programmatic evaluation. The purpose of this exercise, however, was to get a clear picture of the nature of locally generated test data and of the specific difficulties that would arise in trying to use these data for evaluation beyond the scope of an individual project, so that it would be possible to design more appropriate data collection instruments and procedures for Phase II of the NEEDS study. Therefore, recognizing that analyses conducted upon the FY66 data would not provide valid or reliable results, the focus of the exercise was placed instead upon data availability rather than data analysis.

Several operating assumptions were set forth. These are not meant to be either descriptions of or recommendations for the operation of ESEA Title I; they were adopted simply as a framework for experimentation.

1. A central objective of the Title I program is to raise the academic achievement level of disadvantaged children. This objective, regardless of the content of individual projects, shall be considered the primary objective of all Title I projects.
2. The instruments appropriate to measure changes in the achievement levels of project participants are standardized achievement tests.
3. The degree of improvement between pre- and post-test scores on these instruments indicate the relative degree to which projects have reached the objective.

The Dependent Variable

The dependent variable selected for the analyses was the median number of months gained by a project group between pre- and post-test administrations of a standard achievement test. The following criteria were used to determine whether or not a given set of test data was adequate.

1. Test scores used as the dependent variable had to be the result of administration of a recognized standardized test in one of three areas: reading achievement, language arts achievement, or general achievement.
2. Scores had to be based upon two different forms of the same test.

3. Scores had to be reported as grade equivalents or in a form covvertible to grade equivalent scores. (From grade equivalent scores, the number of months of gain could then be calculated by subtracting the pre-test score from the post-test score.)
4. The grade span of the group tested had to be appropriate for the level of the test.
5. The post-test administration had to take place within eleven months of the pre-test administration.
6. The population tested had to be the same for both test administrations. Comparison of the project group scores to those of students in a previous year was not admissible.

Independent Variables

The independent variables selected were those which could be hypothesized as having a potential relationship to gains in student scores. Yet, because of the limitations in the source data itself, only those variables which could be easily obtained from FY66 Title I documents were included. The independent variables used were:

1. Duration of the project in weeks.
2. Number of weeks between the pre-test and post-test administration dates.
3. Grade span tested.
4. Project type.
5. Community type (SMSA).
6. Per pupil expenditure from Title I funds on project participants.
7. Non-Title I per pupil expenditure (LEA expenditure per pupil).

8. Teacher/pupil ratio for the project.
9. Percent of Title I budget expended on teachers' salaries.
10. Percent of approved budget finally expended by the project.
11. Number of students in the project.
12. Number of LEAs cooperating in the project.
13. Time of project operation (Summer, school year, or combination of school year and summer).
14. Test used.

The Sample

The test data reported in all FY66 evaluation reports was first reviewed in order to isolate those projects reporting sufficient information on the dependent variable to be included in the analyses. Applying the criteria for the dependent variable to the universe of New England Title I projects (N = 1306) yielded a sample of only sixty-seven (67) projects reporting pre- and post-test administration results that satisfied all requirements for the independent variable. Within these sixty-seven projects there were 182 separate pre- and post-test administrations; large projects and projects covering several grades frequently administered different tests to project sub-groups; each complete pre- and post-test administration was considered as a separate unit unit in the analyses. Since the step-wise and multiple correlation analyses required that each subject be complete in all data points, the sample of pre- and post-test administrations were then checked against the list of independent variables. These data were generally more accessible than the dependent variable; deficiencies eliminated only fifteen subjects (three projects) from the sample. As a result, the final sample consisted of 167 subjects.

The Analysis

After the sample was isolated and the data prepared for processing, a series of analyses were performed in order to partial out the contribution of certain of the independent variables that may have affected the gain score but were not a function of project activities themselves. The test used, the community type (SMSA), and the time between pre- and post-test administrations were three such variables. A series of step-wise and multiple correlation analyses were then performed to examine the contribution of combinations of independent variables to explaining variance in the dependent variable. The results of these analyses are not being reported. The quality of the original data used was too poor to provide reliable results. For example, one analysis indicated that neither test type nor time between testing (regardless of how much time was spent in Title I activities) was significant. These results may or may not be correct, but, considering the data from which they were generated, they are too unreliable for presentation. Then too, the structure of the experiment itself was so restricted by data limitations that, as a research design, this approach is not valid.

Limitations in the Data

The purpose of this exercise, however, was not to obtain valid information on the variables affecting project success. The procedures rather than the results of the analyses were the concern. The exercise proved valuable for several reasons. It illustrated the paucity of useful test data currently being reported at the local level and the 67 reporting projects represent only 5% of all New England FY66 projects. Obviously this sample itself was highly biased and self-selecting. Differing structures of the evaluation reports to some extent controlled the types of test data reported by the LEAs. Degree of state department emphasis upon objective evaluation may also have influenced the sample. Then too, projects that did perform and report on objective testing may have differed in other important ways from those that did not; these differences were not investigated in this demonstration. While over three hundred projects reported some data on the results of standard tests, most of these had to be eliminated from the sample either because results were not reported in a meaningful form or because the data reported suggested that either the test administration or the calculation of the results had been conducted inaccurately. Most errors, however, were in the use of tests themselves. Standard tests designed for one grade level were administered to inappropriate grade groups. The same form of a test was administered as both the pre- and post-tests, the most extreme cases being the combination of an achievement pre-test and an intelligence post-test. Finally, there was no guarantee that even those test scores that appeared reasonable were in fact reliable.

VII.3 TITLE I PROGRAM POLICY

The problems in performing a program evaluation of Title I that would measure its impact upon student behavior do not rest solely upon the data collection forms or upon local ability to furnish certain data. Some of the difficulties result from a fundamental ambiguity in the operating policies of the Title I program. As it now functions, the program stands somewhere between providing the schools with categorical aid and general aid. It incorporates aspects of both. Yet, it also suffers some of the weaknesses of both approaches without capitalizing fully upon potential strengths of either.

Title I operates as though it were a categorical aid program in several respects. First, it is designed to serve a specific population of students, those who are considered "educationally deprived." Funds are distributed to local education agencies on the basis of family income levels of children living within their geographic areas on the assumption that there is a relationship between financial and educational deprivation. Secondly, although all eligible school districts are assigned a maximum basic grant, they do not receive these funds automatically; local education agencies are expected to devise their own projects, submit applications for review and approval, and evaluate project success. Reports concerning individual project activities, enrollments, evaluations, and expenditures are required of each project by the state education agencies. The United States Office of Education in turn requires detailed reports on statewide activities from the state departments of education. There is an attempt to maintain close state and Federal monitoring of the program to assess its effects at local, state, and national levels.

Although these formal requirements appear to qualify Title I as a categorical aid program, in actual operation, the program is more characteristically general aid rather than categorical. Within broad limits, most of the decisions concerning which children qualify to participate in a given project, which local educational needs are of highest priority, what types of activities will be conducted to meet these needs, what types of expenditures will be made, and how extensive project evaluations will be are left to the discretion of the local school districts. There are few restrictions placed upon either the substantive nature of local projects or upon project objectives. While most projects during FY66 were concerned with academic subject areas (reading, language arts, and other types of academic instruction accounted for 68% of all projects), some projects, particularly in cultural enrichment and guidance services, emphasized attitude change rather than academic growth except insofar as the two are related. Other projects were less directly concerned with immediate changes in pupil behavior, and were designed instead to provide health services, teacher aides, or new equipment. Improvements in these areas could raise achievement and alter attitudes, but the effects of such peripheral activities are more difficult to measure.

Expenditure patterns illustrate that Title I also has a rather broad impact on school budgets. While most of the FY66 funds were spent for instruction and equipment, all of the standard budget categories outlined in *Financial Accounting for Local and State School Systems* were used by New England projects, including "Plant Operation," "Maintenance," "Fixed

Charges," "Remodeling," and "Construction." These five categories combined accounted for 5.3% of the FY66 Title I expenditures. "Transportation," "Food Services," and "Health Services" expenditures add another 6.2% to the total expenditures in New England. "Equipment" alone accounted for 22.3%. While these percentages themselves are relatively small, the percentages of projects devoting some portion of their Title I budgets to these areas run as high as 26% for "Fixed Charges" and 41% for "Transportation." These patterns of expenditure suggests that Title I funds are proving useful in many areas of school operation.

Within this structure of Title I, the questions of satisfactory project and program evaluation and historical documentation are left unresolved. The wide range in what is considered appropriate Title I activity and expenditure makes the program so general in its focus that evaluation of its impact becomes an extremely difficult task. In the manner of a categorical aid program, Title I now places some emphasis upon assessment at the local, state, and national levels. Yet, data from isolated evaluation conducted upon projects that differ widely in purpose and in content and that use different and not necessarily comparable instruments for measurement and include students of varying ages and abilities cannot be reasonably combined to provide a coherent picture of state, regional or national program success.

There are three alternatives for its future direction. One is for Title I to become a straightforward general aid program. This approach has some advantages over the current policy. First, much of the administrative machinery required for conducting Title I at the state and national levels could be eliminated. The present administrative costs, which are at least 1% of the entire Title I program budget, could be substantially reduced and these funds distributed instead directly to the school districts. In some ways a general aid program is a logical extension of the current policy of leaving project content up to the local schools. The need to monitor these activities would simply be removed. This approach would certainly simplify the mechanics of the total program by eliminating the extensive data gathering efforts which are not now providing much useful or comparable information.

There are, however, severe limitations in a totally general aid approach. Obviously, the original focus of Title I as an assistance in the education of children from low income families could no longer exist. If funds were distributed only to public school systems, private and parochial school children as well as those not enrolled in school would not necessarily benefit from the funds. More importantly, as a general aid program, Title I would lose its current potential for contributing *substantively* to the field of education. By decreasing the possibilities for concentrated research on and evaluation of its impact upon student behavior, it would be unable to compare the effects of different types of projects and activities upon particular educational needs. It is in this area that Title I, as a nationwide program aimed at a unique student population, could provide not only financial but also methodological assistance to the schools.

If, on the other hand, Title I were converted to a strict categorical aid program, the opportunity for measuring its impact upon specific areas of deprivation and remediation could greatly increase. Particular subject areas such as reading or guidance in which the need for additional programs has already been strongly expressed might be selected as focal to the program and local education agencies directed to use Title I funds in these priority areas only. The criteria for selecting project participants might become standard so that the population served by Title I would be at least clearly identified, if not relatively homogeneous. Finally, the project activities themselves, the methods and approaches used to meet objectives, might be stipulated by state and Federal education agencies. Such tightening of Title I's purpose and operation would provide a well-structured framework within which to assess the benefits of expenditures and of various approaches to similar educational problems. The task of evaluation would be greatly simplified and presumably more reliable and more useful than it can be under the present policy.

Yet, this alternative is neither politically practical nor ultimately sound. It would initiate Federal control over local education and deny the ability of local schoolmen to assess and combat their own particular educational needs. It could work to discourage rather than encourage innovation at the local level. By stipulating specific areas for project activity, it could disregard the unique needs of particular communities and groups of children that might be more critical to them than the more frequent needs of disadvantaged children. In spite of its appeal to those responsible for evaluation, the categorical aid alternative is probably unwise. The purpose of the Title I program is to assist in improving the education of children; evaluation is only a means to that end.

The strongest solution for the present seems to be in emphasizing some aspects of both extremes within the current policy framework so that constructive feedback and evaluation are possible without seriously restricting the range of acceptable educational priorities identified by local schools. The Title I program might more precisely establish its objectives in achievement and attitude development and stipulate that activities supported by Title I funds be directly concerned with these objectives. This would curtail projects not immediately focused upon changing certain student behaviors. Addition of teacher aides and purchase of equipment and materials, for example, would be sanctioned only as means of implementing projects in specific substantive areas rather than as purposes in themselves. As approaches to improving education in particular fields, these activities would become methods rather than ends and as such their effectiveness could be more easily assessed.

Secondly, the range of appropriate Title I objectives and activities might be narrowed so that it does not overlap with other Federal programs. Headstart funds, for example, already provide some support for the preschool child; ESEA Title II furnishes library materials; some vocational education activities already receive Federal assistance. By permitting Title I to compete in these areas as well as in most other areas of the school program, it becomes difficult to isolate how Title I is operating, let alone to measure its success. By spreading itself thin, Title I may be weakening its impact, it is certainly obscuring evidence for determining its effectiveness. When allowable project objectives become more specific, the task of evaluation becomes reasonable. Not only can success be measured against objective criteria, but gradually the variables contributing to success may be identified and replicated in other situations.

At the same time that Title I became more specific in its focus, it could also become more lenient in its approach to data collection. The proliferation of data gathering which now affects all Title I participant LEAs and projects could be substantially reduced. It is neither efficient nor productive to collect large amounts of descriptive and evaluative information from all projects. For the entire population, a minimal amount of descriptive information would be sufficient to document program activities and to monitor its general operation. A representative sample of projects could then be studied in depth and these projects could produce the data with which to evaluate and generalize about the effectiveness of the Title I program.

VII.4 AN APPROACH TO PROGRAM EVALUATION

The conduct of an adequate program evaluation of Title I need not be prohibited by the looseness of program policy nor by the present data collection mechanisms. The real issue regarding program evaluation lies not in policy ambiguity or in poor data collection procedures but rather in the approach to evaluation itself. The regulations regarding the operation of projects and the data collection instruments imply that the Title I program *can* be properly evaluated from within the present structure, and that the project data now being collected can be used to build a picture of program success. In fact, this approach itself is not only practically unfeasible, but, more importantly, it assumes a basic comparability among individual project objectives, activities, and evaluation instruments that both the program policy and the data on FY66 projects deny. The vagueness of policy does not now offer common objective standards against which to measure project or program success and the poor quality of available data does not provide information that can be reasonably incorporated into a systematic program evaluation.

Yet, even if local schools were able to properly assess their own project activities using valid research techniques, as long as such evaluations are performed in isolation and measure local objectives with locally selected instruments, the individual results will not provide the appropriate information for judgments concerning the total program. Local evaluations do not even give the LEAs particularly helpful indices of how successful their Title I efforts have been. The children affected by Title I are, as a group, different from the average. Their success is not entirely measurable in terms of standard or local norms. Without access to results of project activities conducted for comparable groups of children, the individual LEA is unable to assess the relative effectiveness of its particular project.

An adequate program evaluation must be conducted in a controlled and systematic manner. The prerequisite for such evaluation is that the program objectives first be defined in operational terms. It is not necessary that all projects have the same specific objectives, but it is necessary that some central and measurable outcomes of Title I as a program be selected for study. For example, Title I has been enacted to alleviate the effects of cultural deprivation. It is reasonable to assume that cultural deprivation is reflected in low scores on achievement test batteries. Hence, in these terms, a major objective of the Title I program and of the projects it supports is to improve educational achievement, operationally defined as scores on achievement test batteries. For program evaluation, individual projects, regardless of their more particular goals should be assessed in the light of some overriding objectives. It would then be possible to study how well various types of projects achieve these objectives and the extent to which there are side benefits from certain types of projects whose goals differ from the major goals of the program.

Once the objectives to be studied are established, a common set of appropriate instruments should be selected so that all projects involved in an evaluation program are measured comparably. Both pre- and post-test batteries should be uniformly administered and centrally scored so that there is control over the quality of the testing results. This would insure not only that the instruments were comparable, but that the results were equally reliable for all projects. In addition to testing results, other pupil and environmental data on variables relating to communities, school systems, project schools, project activities and staff, and project participant characteristics should also be gathered systematically and thoroughly from projects and LEAs included in the study. It is obvious that current Title I data collection instruments and procedures are not appropriate for collecting such information. Although their present structures can be revised, the data needed for program evaluation should be both more detailed and more accurate than a massive data collection program is likely to provide.

In terms of program evaluation, however, it is neither reasonable nor necessary to collect extensive data on all Title I projects nor to perform intensive evaluation of all projects. A carefully selected sample of representative projects is obviously a more appropriate group for such evaluation than is the entire population. Providing that the sample itself is properly drawn, the results of the study can be generalized to apply to the larger population of projects.

If an evaluation were conducted in a coordinated and systematic manner, it would then become possible to examine the success of Title I as a program and value of individual projects within the program in terms of some common standards. The results of such a study could be used to strengthen the roles of the United States Office of Education and the state departments of education in their relations with the LEAs. By disseminating substantive information on the operation and success of projects, they can assist the schools in planning and improving their projects in the light of activities that have proved effective in similar communities.

APPENDIX: COMPUTER PROGRAMS

This appendix describes the data processing support for the NEEDS project, *The Impact of Title I: An Assessment Program for New England*. It focuses first on the approach taken by the data processing staff to the tasks at hand, and second, on the general computer programs developed to deal with these tasks. This information is presented in the hope that the experience might provide assistance to those involved in educational (or other) research based on data analysis.

The programs described here, including those listed at the end of the appendix, are all written in FORTRAN II to be run under the FORTRAN Monitor System (FMS) on the IBM 7094 computer. Other programs written for the project include a number of programs for the IBM 1401. These were written in Autocoder assembly language and NEEDS' SATIRE Compiler language and were used to build, reformat, and update data files which then became input to the 7094.

The most crucial decision facing the programming staff was the extent to which the project's programming efforts were to be systematized and generalized. At first glance it appeared that the tasks at hand demanded a great number of very specific programs which could be run only once. Clearly, the programs to isolate particular variables had to be of this type. On the other hand, a number of more important considerations supported the decision to use generalized subroutines wherever possible. The time required for subroutine linkages would be more than offset by the input-output time saved by a compact program that allowed storage of more variables on a given input pass.

Two further considerations made the use of a system of subroutines desirable. First, debugging would be greatly simplified in that it would need to be done only once, for a clearly defined, one-purpose routine that could thereafter be depended upon. Finally, it was hoped that a system of general purpose cross-tabulation subroutines could prove useful - at least as prototypes - for a number of other applications.

The largest generalized programming effort of the project was that which produced the cross-tabulation output system. This is a group of linked subroutines which produce cross-tabulation charts and related breakdown statistics for variables which have previously been isolated and added into cross-tabulation arrays. (The subroutine which does the adding is conceptually a part of the total package, even though it is called separately after variables for each project have been isolated.) Basic to the development of this output package were the choice of statistics to be computed and the design of arrays in which the contributing sums, etc. were to be collected. The statistics decided upon were sums, means, standard deviations, and ranges. "Hits" and "misses" were used to indicate numbers of projects (or LEAs) responding (because of the difficulty of distinguishing between blank or null responses and zeros, only variables greater than zero were considered to constitute hits).

All of these statistics were first conceptualized as defining one massive array with the dimensions (36, 6, 120) where the first dimension varies with SMSA code, the second with state code, and the third with Major Project Type. The first dimension (36) breaks into 6 blocks, within each of which SMSA varies in the range 1-6. These blocks contain variable sum, sum of squares, low value (exclusive of zero), high value, "hits," and "misses," respectively. Similarly, the third dimension (120) breaks into 8 blocks - for each of the 8 variables which could be cross-tabulated at a time - in which Major Project Type varies from 1-15. For machine purposes, the hits and misses were collected in a separate integer array of dimensions (12, 6, 120) while the other statistics were collected in a floating-point array with dimensions (24, 6, 120). This design was realized as follows:

Subscripts, by convention, are:

J = SMSA code
K = State code
L = Major Project Type
N = Variable number

The floating-point array is Z(J1, K, L1); actual subscripts for a given project and variable (N) are determined as follows:

J1 = SMSA for SUM
SMSA +6 for SUM of SQUARES

SMSA +12 for LOW
SMSA +18 for HIGH
K = STATE
L1 = 15 (N-1) + MPT

The integer array is IZ(J1, K, L1); actual subscripts are determined thus:

J1 = SMSA for HITS
SMSA +6 for MISSES
K = STATE
L1 = 15 (N-1) + MPT

With L1 ranging as high as 120, this pair of arrays takes up $25{,}920_{10}$ core locations. The maximum number of variables which can be cross-tabulated at any one time is 8. For each of these variables the following output is produced.

Part 1: SMSA by State, with 15 "layers" for the 15 Major Project Types (MPT 15 = error).

Part 2: SMSA by Major Project Type, with 6 layers for the six states.

Part 3: STATE by Major Project Type, with 6 layers for the six SMSA codes (SMSA 6 = error).

The total output for each of the variables cross-tabulated in this fashion is 39 pages.

The fine detail provided by this three-dimensional array was found most helpful for a few variables, but the necessity of taking a full pass through the input tape for each 8 variables, and the bulk of the output, made it inadvisable for use with large numbers of variables on which slightly less detailed breakdown statistics were required. Therefore, the bulk of the cross-tabulation analysis was performed using a system similar to that described above but which gave more summary statistics on a larger number of variables and produced more compact output.

This system uses the dimensions SMSA, state, and Major Project Type to define three 2-dimensional matrices rather than a single 3-dimensional array. Within these matrices, each cell represents the intersection of a particular value along one dimension (the state of Maine, for example) with a particular value along a second dimension (e.g., SMSA 5) and all values for the third dimension. A given cell, then, contains the sum of what was contained in a row or column of cells in the 3-dimensional array. Since this makes necessary fewer cells for each variable, the number of variables which can be processed in a single input pass increases from 8 to 20. Furthermore, the number of pages of charts per variable drops from 39 to 5.

The arrays used in implementing this system are of the following dimensions:

AR1(24, 6, 20), AR2(24, 14, 20), AR3(24, 14, 20)
JAR1(12, 6, 20), JAR2(12, 14, 20), JAR3(12, 14, 20)

The subscripts J, K, L and N are used as above. Handling of a given variable for a given project is according to the following design:

AR1(J, K, N) where: J = SMSA for VARIABLE SUM
SMSA +6 for SUM of SQUARES
SMSA +12 for LOW
SMSA +18 for HIGH
K = STATE CODE
N = VARIABLE NUMBER

JAR1(J, K, N) where: J = SMSA for HITS
SMSA +6 for MISSES
K = STATE
N = VARIABLE NUMBER

AR2(J, K, N) where: J = SMSA for VARIABLE SUM
SMSA +6 for SUM of SQUARES
SMSA +12 for LOW
SMSA +18 for HIGH
K = MAJOR PROJECT TYPE
N = VARIABLE NUMBER

JAR2(J, K, N) where: J = SMSA for HITS
SMSA +6 for MISSES
K = MPT
N = VARIABLE NUMBER

AR3(J, K, N) where: J = STATE for VARIABLE SUM
STATE +6 for SUM of SQUARES
STATE +12 for LOW
STATE +18 for HIGH
K = MPT
N = VARIABLE NUMBER

JAR3(J, K, N) where: J = STATE for HITS
STATE +6 for MISSES
K = MPT
N = VARIABLE NUMBER

These arrays are held in COMMON, as are the subscripts J, K, and L and a vector called VARS which contains up to 20 variables. Three programming functions must be performed to manipulate these variables and arrays in the transition from raw data to cross-tabulation output:

1) Read the input tape, one project at a time, isolating the desired variables in VARS;

2) Once the variables have been isolated for each project, add them to the arrays according to that project's characteristics;

3) When all projects have been read, write out a table (consisting of three "parts," one for each matrix type) for each variable.

The first of these functions is performed by the MAIN program, which is entirely dependent on the formats of the input data and the variables desired for a particular pass through the input tape. The latter two functions are performed by a series of linked subroutines which are independent of the data itself and are merely called and passed parameters by the main program. Figure 1 illustrates the general logical flow of a main program and its relationship to the "output package" subroutines.

The following paragraphs discuss briefly the subroutines used in the cross-tabulation package and a few of the many utility subroutines which were used wherever possible to avoid repetitive coding. Each subroutine is introduced with its name and arguments in the same format as the FORTRAN SUBROUTINE statement.

I. OUTPUT PACKAGE SUBROUTINES

STORE (MVAR, NVAR)

Called by main programs for application, evaluation, and fiscal data. The logic of this subroutine is flowcharted in Figure 2. The coding is Program 1. The function of the routine is to update the cross-tabulation arrays from the variables in VARS according to the subscripts J, K, and L. MVAR is the number of the first variable in VARS to be "stored;" NVAR is the number of the last. The most frequently used call is:

```
CALL STORE  (1, 20)
```

FUNCTION FHI (X, Y)

Called by STORE, MASTER, and ROW; and also by special STORE-like programs for basic and fiscal data. The coding for this function is Program 2. FHI returns as its value the larger of the two arguments. It is used repetitively to determine the largest single value recorded in a particular cell.

FUNCTION FLOW (X, Y)

Called by STORE, MASTER, ROW, and basic and fiscal data storing routines. Coding for FLOW is Program 3. This function returns as its value the lower of the two arguments, except that zero is not returned unless both arguments are zero. The function is used to record the lowest value (except zero) yet recorded for a given cell. Once lowest and highest values for a cell have been recorded, the range for that cell is simply their difference. Lows and highs are maintained throughout the system so that row, column and grand ranges can be computed.

MASTER (MVAR, NVAR, MPART, NPART)

Called by main programs for application, evaluation and fiscal data. The flowchart for MASTER is Figure 3; the coding appears as Program 4. This routine controls the output of charts from the cross-tabulation arrays. It also computes grant statistics and keeps track of column totals. Since variables being tabulated must previously have been stored in the arrays, the limiting arguments MVAR and NVAR generally correspond to those used in calls to STORE. Variable numbers range from 1 through 20 and have the same meanings as the subscripts of VARS. MVAR is the number of the first variable to be tabulated by a particular call; NVAR is the number of the last. Similarly, MPART is the number of the first part desired in each table; NPART is the number of the last. Either of these arguments may take on values in the range 1-3, but of course MPART must not exceed NPART. The meanings of part numbers are:

Part 1 = SMSA by state

Part 2 = SMSA by Major Project Type

Part 3 = State by Major Project Type

The most typical call is:

```
CALL MASTER (1, 20, 1, 3)
```

For each variable it tabulates, MASTER reads a minor heading card describing the data and units in this table. This information is then printed at the top of each part within that table.

PGTOP (ITABNO, H2, H3, IPART, IFREQ, MISSES, SUMVR, GMEAN, GSTDDV, GRANGE, ISW)

Called by MASTER. Coding for this routine is Program 5. PGTOP prints the page heading, including the grant statistics, at the beginning of each part. At another point in MASTER, when eight rows have been written on a page, PGTOP is called with ISW = 1, so that it prints only a one-line subheading. In either case, the routine concludes by writing the top row of dashes for the next row.

ROW (IROW, ARRAY, JARRY, SUMVR, IFREQ, COL, ICOL)

Called by MASTER, and by the basic data output-controlling routine (BASIC). ROW coding appears as Program 6.

The bulk of the output is produced by this short routine. As it rotates subscripts through the limits set for a given table, MASTER selects elements for cells and passes them to ROW for printing via the small arrays ARRAY and

JARRY. ROW also adds these values into the column total arrays COL and ICOL. SUMVR (grand sum) and IFREQ (total hits) are used to compute percentages for each cell.

BOTTOM (COL, ICOL)

Called by MASTER and BASIC. Coding for BOTTOM is Program 7. This routine accepts the column total arrays as arguments, prints the column total cells, and computes and prints grand statistics for the part.

II. UTILITY SUBROUTINES

SKIP (N)

This routine reads over N records on tape. The routine is useful when a main program is isolating variables which are several "cards" apart.

PTEST (J, K, L, ID)

Called by main programs for evaluation and fiscal data. This routine tests the subscripts J, K, and L to make sure that they fall within the proper range. If any does not, it is corrected and a message is written on the system print tape. Similar subroutines perform the same tasks for the application and basic data analysis.

FISCAL [No arguments]

Called by the fiscal data main programs. This routine reads the fiscal records for a project and places all the amounts into a matrix from which they can be easily selected for isolation as variables or for further computation.

FIGURE 1 GENERAL SYSTEM OPERATION

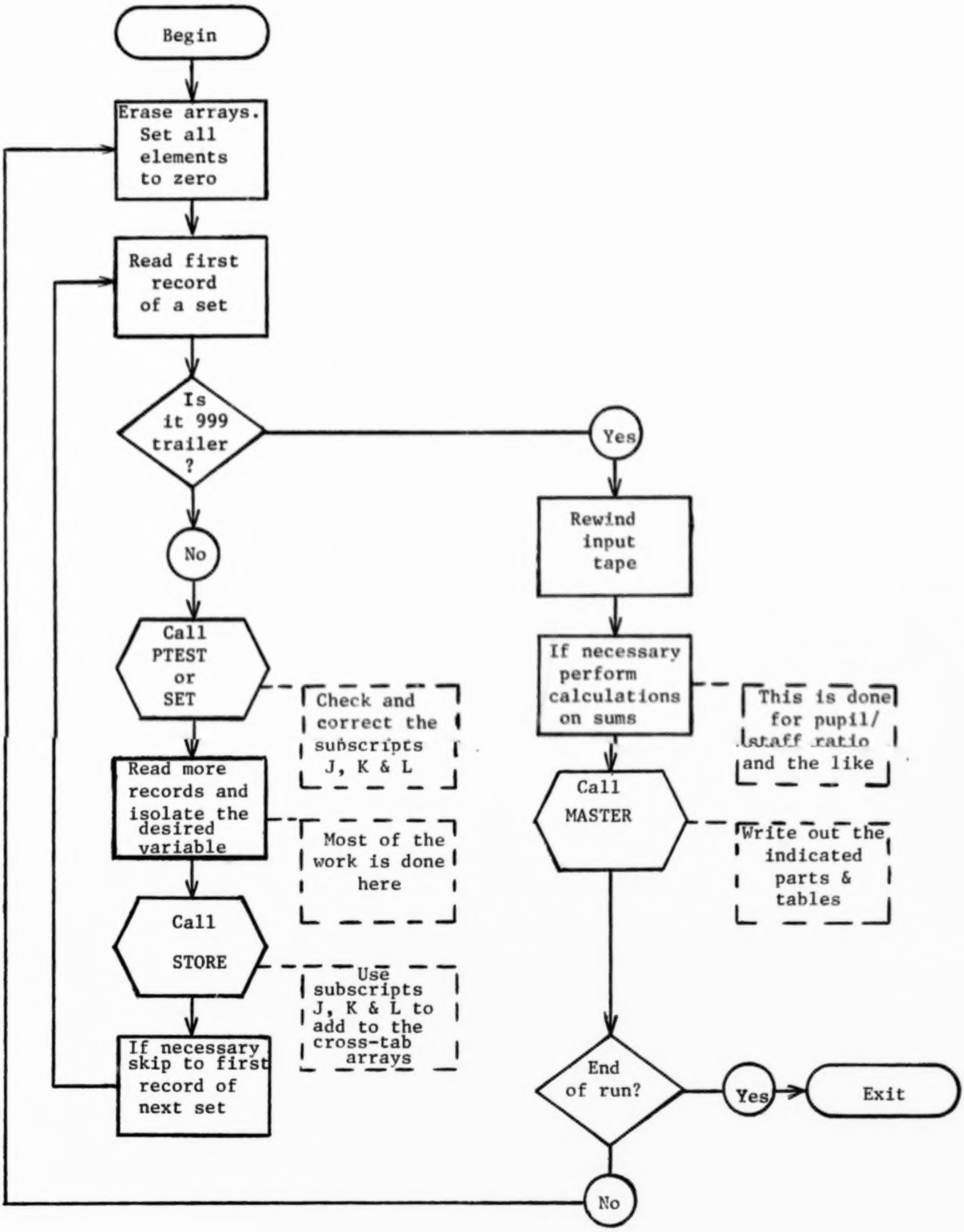

Begin
Erase arrays. Set all elements to zero
Read first record of a set
Is it 999 trailer ?
No
Yes
Call PTEST or SET
Check and correct the subscripts J, K & L
Read more records and isolate the desired variable
Most of the work is done here
Call STORE
Use subscripts J, K & L to add to the cross-tab arrays
If necessary skip to first record of next set
Rewind input tape
If necessary perform calculations on sums
This is done for pupil/staff ratio and the like
Call MASTER
Write out the indicated parts & tables
End of run?
Yes
Exit
No

FIGURE 2 SUBROUTINE STORE

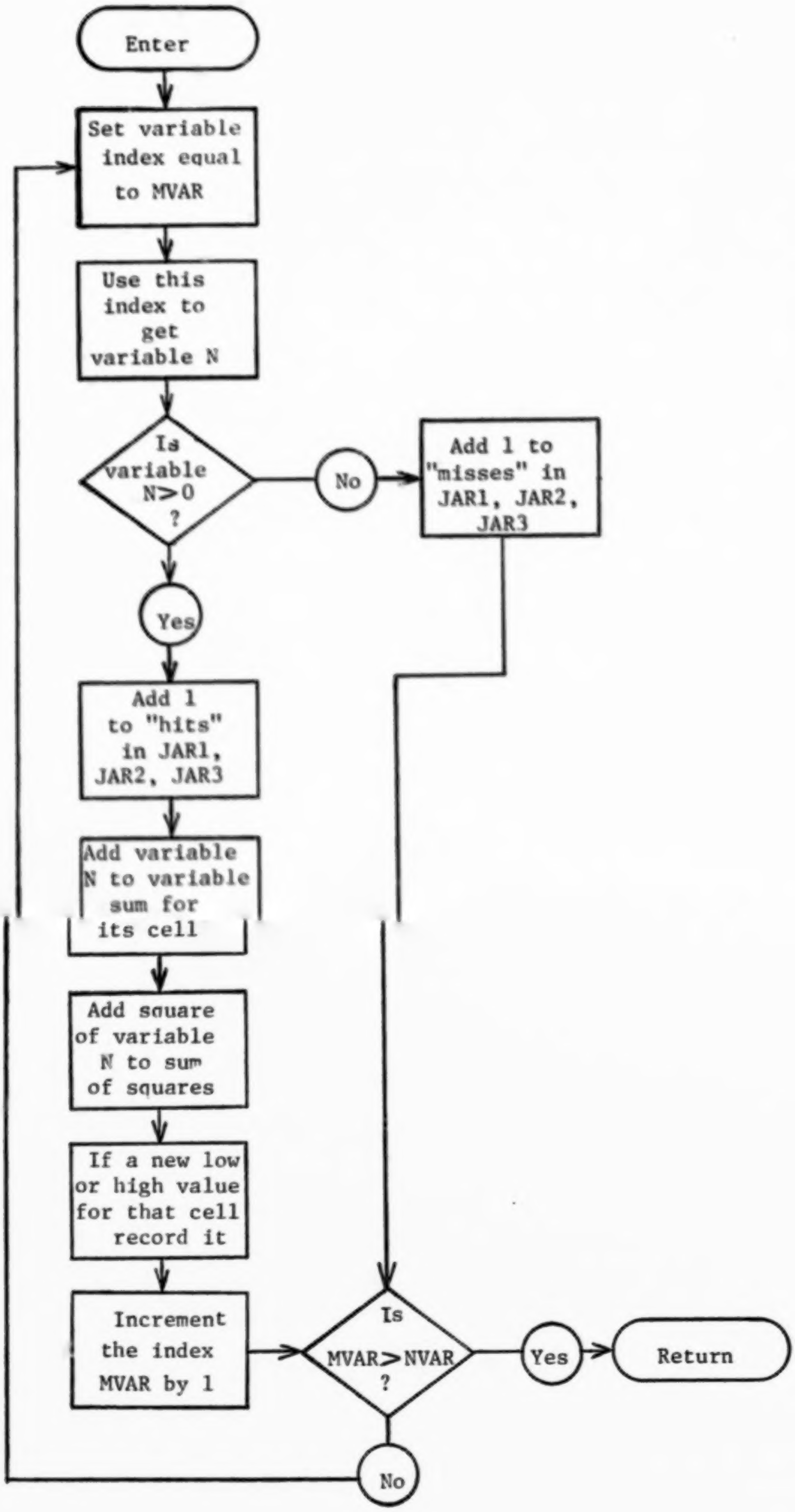

Enter
Set variable index equal to MVAR
Use this index to get variable N
Is variable N>0 ?
No
Add 1 to "misses" in JAR1, JAR2, JAR3
Yes
Add 1 to "hits" in JAR1, JAR2, JAR3
Add variable N to variable sum for its cell
Add square of variable N to sum of squares
If a new low or high value for that cell record it
Increment the index MVAR by 1
Is MVAR>NVAR ?
Yes
Return
No

FIGURE 3 SUBROUTINE MASTER

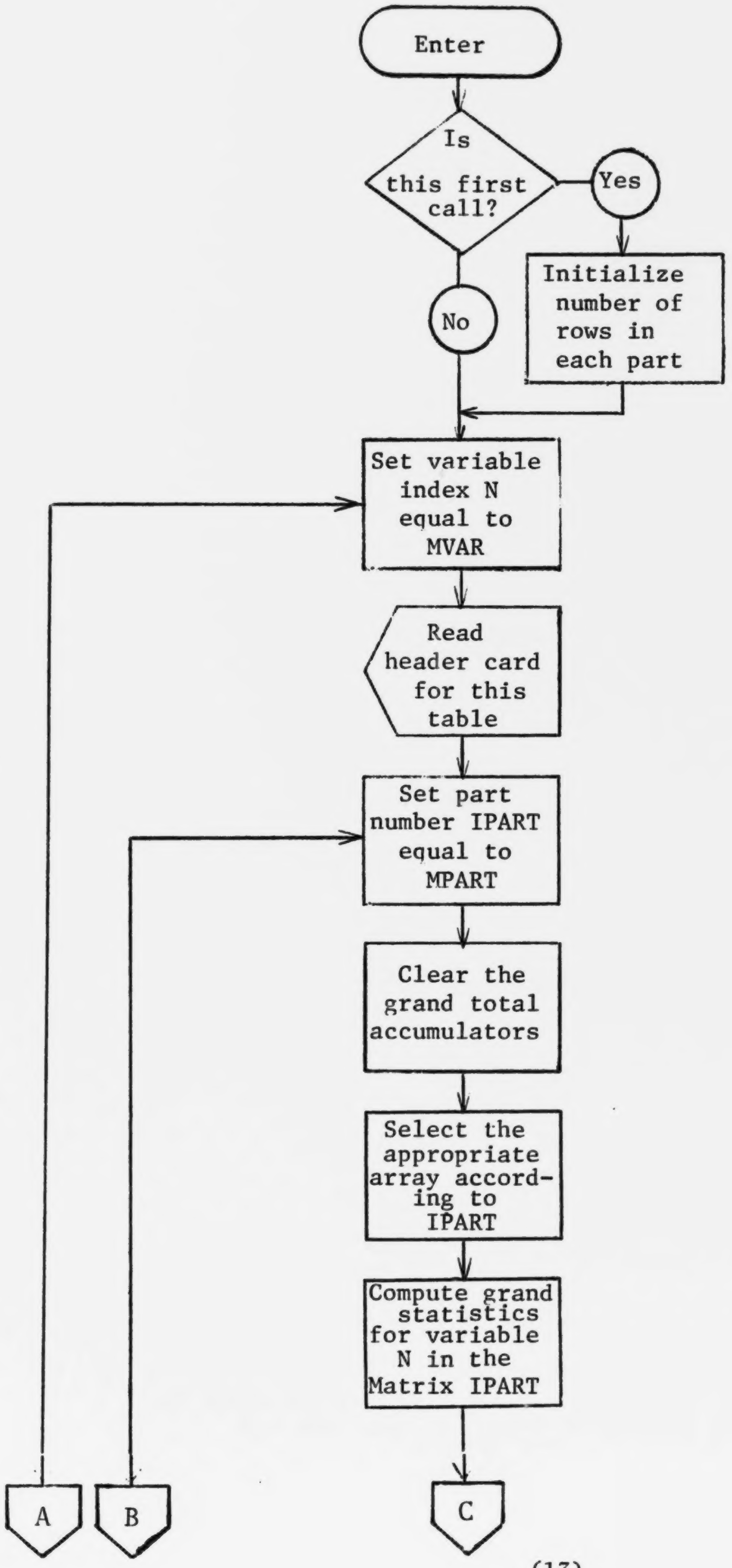

Enter
Is this first call?
Yes
Initialize number of rows in each part
No
Set variable index N equal to MVAR
Read header card for this table
Set part number IPART equal to MPART
Clear the grand total accumulators
Select the appropriate array according to IPART
Compute grand statistics for variable N in the Matrix IPART
A
B
C

FIGURE 3 (Continued)

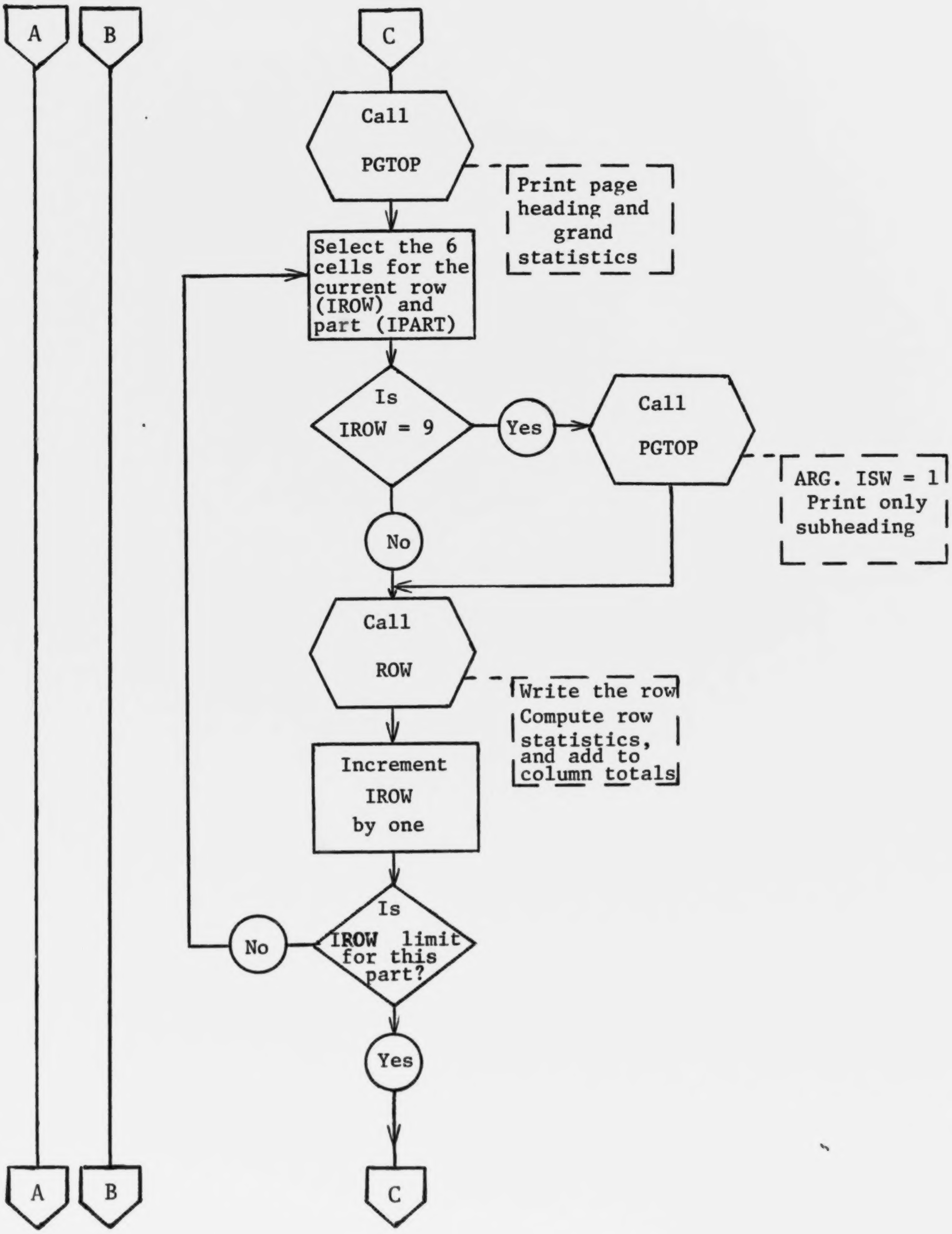
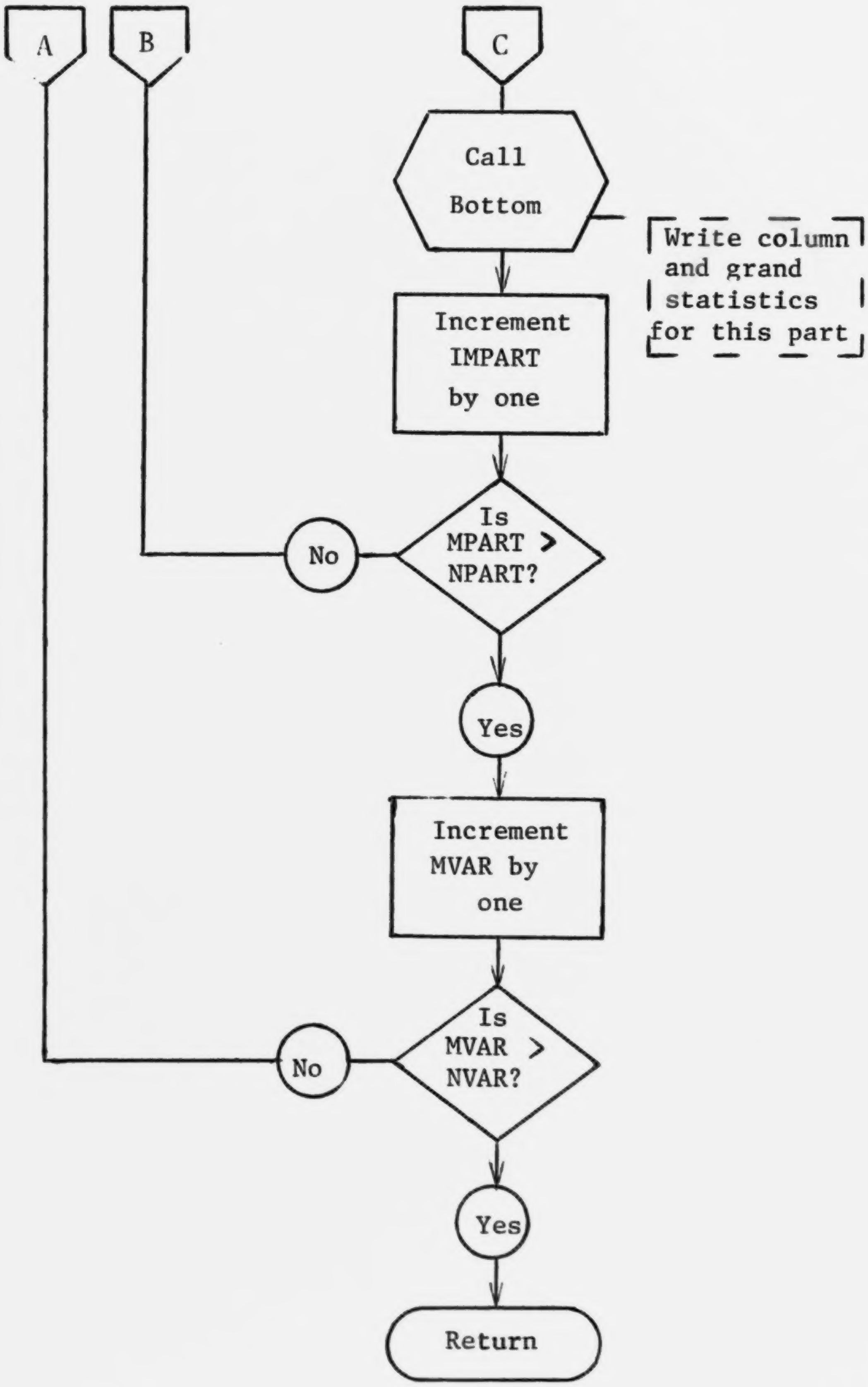

A
B
C
Call PGTOP
Print page heading and grand statistics
Select the 6 cells for the current row (IROW) and part (IPART)
Is IROW = 9
Yes
Call PGTOP
ARG. ISW = 1 Print only subheading
No
Call ROW
Write the row Compute row statistics, and add to column totals
Increment IROW by one
Is IROW limit for this part?
No
Yes
A
B
C

FIGURE 3 (Continued)


A
B
C
Call Bottom
Write column and grand statistics for this part
Increment IMPART by one
Is MPART > NPART?
No
Yes
Increment MVAR by one
Is MVAR > NVAR?
No
Yes
Return

PROGRAM 1   STORE

```
      SUBROUTINE STORE(MVAR,NVAR)
      DIMENSION AR1(24,6,20), AR2(24,14,20), AR3(24,14,20),
     1   JAR1(12,6,20), JAR2(12,14,20), JAR3(12,14,20), VARS(20)
      COMMON AR1, AR2, AR3, JAR1, JAR2, JAR3, VARS, J, K, L
      DO 100 N = MVAR, NVAR
      IF (VARS(N)) 20, 20, 30
C     IF VARIABLE IS NULL OR ZERO, ADD TO MISSES
   20 JAR1(J+6,K,N) = JAR1(J+6,K,N) + 1
      JAR2(J+6,L,N) = JAR2(J+6,L,N) + 1
      JAR3(K+6,L,N) = JAR3(K+6,L,N) + 1
      GOTO 100
C        ADD TO HITS, VARIABLE SUM, AND SUM OF SQUARES
   30 JAR1(J,K,N) = JAR1(J,K,N) + 1
      JAR2(J,L,N) = JAR2(J,L,N) + 1
      JAR3(K,L,N) = JAR3(K,L,N) + 1
      AR1(J,K,N) = AR1(J,K,N) + VARS(N)
      AR2(J,L,N) = AR2(J,L,N) + VARS(N)
      AR3(K,L,N) = AR3(K,L,N) + VARS(N)
      AR1(J+6,K,N) = AR1(J+6,K,N) + VARS(N)**2
      AR2(J+6,L,N) = AR2(J+6,L,N) + VARS(N)**2
      AR3(K+6,L,N) = AR3(K+6,L,N) + VARS(N)**2
C         NOW DETERMINE LOWS AND HIGHS
      AR1(J+12,K,N) = FLOW(AR1(J+12,K,N),VARS(N))
      AR2(J+12,L,N) = FLOW(AR2(J+12,L,N),VARS(N))
      AR3(K+12,L,N) = FLOW(AR3(K+12,L,N),VARS(N))
      AR1(J+18,K,N) = FHI(AR1(J+18,K,N),VARS(N))
      AR2(J+18,L,N) = FHI(AR2(J+18,L,N),VARS(N))
      AR3(K+18,L,N) = FHI(AR3(K+18,L,N),VARS(N))
  100 CONTINUE
      RETURN
      END
```

PROGRAM 2 FHI

```
      FUNCTION FHI(X,Y)
      IF (X - Y) 20,20,10
   10 FHI = X
      RETURN
   20 FHI = Y
      RETURN
      END
```

PROGRAM 3 FLOW

```
      FUNCTION FLOW(X,Y)
      IF (X - Y) 10, 10, 40
   10 IF (X) 50, 50, 20
   20 FLOW = X
      RETURN
   40 IF (Y) 20, 20, 50
   50 FLOW = Y
      RETURN
      END
```

PROGRAM 4 MASTER

```
      SUBROUTINE MASTER(MVAR,NVAR,MPART,NPART)
C           THIS IS THE CONTROLLING ROUTINE FOR OUTPUT OF CHARTS OF
C           BREAKDOWNS ON 3 PAIRS OF THE DIMENSIONS SMSA, STATE, AND
C           MAJOR PROJECT TYPE.   THREE TABLES TOTALLING 5 PAGES ARE
C           PRODUCED FOR EACH VARIABLE.
C
      DIMENSION ARRAY(6,4), JARRY(6,2), COL(6,6), ICOL(6,2), LENGTH(3),
     1    H1(5), H2(4), H3(2)
      DIMENSION AR1(24,6,20), AR2(24,14,20), AR3(24,14,20),
     1   JAR1(12,6,20), JAR2(12,14,20), JAR3(12,14,20)
      COMMON AR1, AR2, AR3, JAR1, JAR2, JAR3
      IF (NX - 9) 10, 20, 10
C           INITIALIZE IF FIRST TIME CALLED
   10 LENGTH(1) = 6
      LENGTH(2) = 14
      LENGTH(3) = 14
      NX = 9
   20 DO 200 N = MVAR, NVAR
C           READ CARD TO GET VARIABLE NAME AND UNITS FOR THIS TABLE
      READ INPUT TAPE 5, 5000, H2, H3, ITABNO
C
      DO 200 IPART = MPART, NPART
C           CLEAR THE GRAND TOTAL ACCUMULATORS
      SUMVR = 0.
      SUMSQ = 0.
      IFREQ = 0
      MISSES = 0
      GLOW = 0.
      GHI = 0.
      IF (IPART - 2) 30, 50, 70
C           TOTAL STATE X SMSA GRID TO FIND GRAND STATISTICS
   30 DO 40 J = 1, 6
      DO 40 K = 1, 6
      SUMVR = SUMVR + AR1(J,K,N)
      SUMSQ = SUMSQ + AR1(J+6,K,N)
      GLOW = FLOW(GLOW,AR1(J+12,K,N))
      GHI = FHI(GHI,AR1(J+18,K,N))
      IFREQ = IFREQ + JAR1(J,K,N)
   40 MISSES = MISSES + JAR1(J+6,K,N)
      GO TO 110
C           GRAND STATISTICS FOR SMSA BY MAJOR PROJECT TYPE MATRIX
```

PROGRAM 4 (Continued)

```
   50 DO 60 J = 1, 6
      DO 60 K = 1, 14
      SUMVR = SUMVR + AR2(J,K,N)
      SUMSQ = SUMSQ + AR2(J+6,K,N)
      GLOW = FLOW(GLOW,AR2(J+12,K,N))
      GHI = FHI(GHI,AR2(J+18,K,N))
      IFREQ = IFREQ + JAR2(J,K,N)
      MISSES = MISSES + JAR2(J+6,K,N)
   60 CONTINUE
      GO TO 110
C           GRAND STATISTICS FOR STATE X MAJOR PROJECT TYPE MATRIX
   70 DO 80 J = 1, 6
      DO 80 K = 1, 14
      SUMVR = SUMVR + AR3(J,K,N)
      SUMSQ = SUMSQ + AR3(J+6,K,N)
      GLOW = FLOW(GLOW,AR3(J+12,K,N))
      GHI = FHI(GHI,AR3(J+18,K,N))
      IFREQ = IFREQ + JAR3(J,K,N)
      MISSES = MISSES + JAR3(J+6,K,N)
   80 CONTINUE
  110 GMEAN = SUMVR/FLOATF(IFREQ)
      GSTDDV = SQRTF(SUMSQ/FLOATF(IFREQ) - GMEAN**2)
      GRANGE = GHI - GLOW
      CALL PGTOP(ITABNO, H2,H3,IPART,IFREQ,MISSES,SUMVR,GMEAN,
     1     GSTDDV, GRANGE,0)
      ERASE COL, ICOL
      INDEX = LENGTH(IPART)
      DO 180 IROW = 1, INDEX
      IF (IPART - 2) 120, 140, 160
C           PART1 - SMSA ACROSS, STATE DOWN
  120 DO 130 I = 1, 6
      DO 125 MM = 1, 4
      MN = (MM-1)*6 + I
  125 ARRAY(I,MM) = AR1(MN,IROW,N)
      JARRY(I,1) = JAR1(I,IROW,N)
  130 JARRY(I,2) = JAR1(I+6,IROW,N)
      GOTO 175
C           PART 2 - SMSA ACROSS, MPT DOWN
  140 DO 150 I = 1, 6
      DO 145 MM = 1, 4
      MN = (MM-1) * 6 + I
  145 ARRAY(I,MM) = AR2(MN,IROW,N)
      JARRY(I,1) = JAR2(I,IROW,N)
  150 JARRY(I,2) = JAR2(I+6,IROW,N)
      GOTO 175
```

PROGRAM 4 (Continued)

```
C          PART 3 - STATE ACROSS, MPT DOWN
  160 DO 170 I = 1, 6
      DO 165 MM = 1, 4
      MN = (MM-1) * 6 + I
  165 ARRAY(I,MM) = AR3(MN,IROW,N)
      JARRY(I,1) = JAR3(I,IROW,N)
  170 JARRY(I,2) = JAR3(I+6,IROW,N)
C          WRITE THE ROW
  175 IF (IROW - 9) 178, 176, 178
  176 CALL PGTOP(ITABNO,H2,H3,IPART,IFREQ,MISSES,SUMVR,GMEAN,
     1    GSTDDV, GRANGE, 1)
  178 CALL ROW(IROW, ARRAY, JARRY, SUMVR, IFREQ, CCL, ICOL)
  180 CONTINUE
      CALL BOTTOM(COL,ICOL)
  200 CONTINUE
      RETURN
 5000 FORMAT (6A6, I4)
      END
```

PROGRAM 5   PGTOP

```
      SUBROUTINE PGTOP(ITABNO,H2,H3,IPART,IFREQ,MISSES,SUMVR,
     1    GMEAN,GSTDDV,GRANGE,ISW)
C
      DIMENSION ARRAYS(24,17,60), DUMMY(23), H1(5), H2(4), H3(2)
      COMMON ARRAYS, DUMMY, H1
C
      IF (NY - 9) 10, 20, 10
C          INITIALIZE PAGE NUMBER IF FIRST CALL
   10 IPAGE = 0
      NY = 9
   20 IPAGE = IPAGE + 1
      WRITE OUTPUT TAPE 10, 5000, H1, ITABNO, IPART, IPAGE
      IF (ISW) 30, 30, 120
   30 WRITE OUTPUT TAPE 10, 5010, H2, H3, IFREQ
      WRITE OUTPUT TAPE 10, 5020, MISSES
      GO TO (40, 50, 60), IPART
   40 WRITE OUTPUT TAPE 10, 5030, SUMVR
      GO TO 70
   50 WRITE OUTPUT TAPE 10, 5040, SUMVR
      GO TO 70
   60 WRITE OUTPUT TAPE 10, 5050, SUMVR
   70 WRITE OUTPUT TAPE 10, 5060, GMEAN
      WRITE OUTPUT TAPE 10, 5070, GSTDDV
      WRITE OUTPUT TAPE 10, 5080, (J, J = 1, 6), GRANGE
      WRITE OUTPUT TAPE 10, 5090
      RETURN
  120 WRITE OUTPUT TAPE 10, 8000
      WRITE OUTPUT TAPE 10, 6010
      RETURN
 8000 FORMAT (1H0)
 5000 FORMAT (22H1CROSS-TABULATION FOR , 5A6, 19X, 10HTABLE NO. , I3,
     1    3X, 5HPART , I1, 18X, 5HPAGE , I4)
 5010 FORMAT (1H0, 2X, 26HTHE TABULATED VARIABLE IS , 4A6, 4X,
     1    10HUNITS ARE , 2A6, 19X, 11HGRAND COUNT, 5X, 1H= 8X, I7)
 5020 FORMAT (1H ,  97X, 12HGRAND MISSES, 4X, 1H=, 8X, I7)
 5030 FORMAT (1H , 2X, 30HSMSA TYPE ACROSS BY STATE DOWN, 65X,
     1    11HGRAND TOTAL, 5X, 2H= , F14.2)
 5040 FORMAT (1H , 2X, 43HSMSA TYPE ACROSS BY MAJOR PROJECT TYPE DOWN,
     1    52X, 11HGRAND TOTAL, 5X, 2H= , F14.2)
 5050 FORMAT (1H , 2X, 39HSTATE ACROSS BY MAJOR PROJECT TYPE DOWN, 56X,
     1    11HGRAND TOTAL, 5X, 2H= , F14.2)
 5060 FORMAT (1H ,  97X, 10HGRAND MEAN, 6X, 2H= , F14.2)
 5070 FORMAT (1H ,  97X, 18HGRAND STD. DEV. = , F14.2)
 5080 FORMAT (1H , 3H * , 6(7X, I1, 7X), 4X, 11HGRAND RANGE, 5X, 2H= ,
     1    F14.2)
 5090 FORMAT (1H , 3H  *, / 1H , 3X, 6(15HI--------------), 1HI)
 6010 FORMAT (1H0, / 4X, 6(15HI--------------), 1HI)
      END
```

PROGRAM 6   ROW

```
      SUBROUTINE ROW(IROW, ARRAY, JARRY, SUMVR, IFREQ, COL, ICOL)
      DIMENSION ARRAY(6,4), JARRY(6,2), COL(6,6), ICCL(6,2), HPCT(6),
     1    GPCT(6)
C
      COUNT = FLOATF(IFREQ)
      WRITE OUTPUT TAPE 10, 5000
C         CLEAR THE ROW TOTAL ACCUMULATCRS
C
      IHITS = 0
      MISSES = 0
      RSUM = 0.
      RSUMSQ = 0.
      RHI = 0.
      RLOW = 0.
C         INCREMENT ROW AND COLUMN ACCUMULATORS AND COMPUTE PERCENTS
C         FOR EACH CELL
      DO 40 I = 1, 6
      IHITS = IHITS + JARRY(I,1)
      MISSES = MISSES + JARRY(I,2)
      HPCT(I) = FLOATF(JARRY(I,1)) / COUNT * 100.
      GPCT(I) = ARRAY(I,1) / SUMVR * 100.
      RSUM = RSUM + ARRAY(I,1)
      RSUMSQ = RSUMSQ + ARRAY(I,2)
      RLOW = FLOW(RLOW,ARRAY(I,3))
      RHI = FHI(RHI,ARRAY(I,4))
      DO 20 M = 1, 2
      COL(I,M) = COL(I,M) + ARRAY(I,M)
   20 ICOL(I,M) = ICOL(I,M) + JARRY(I,M)
      COL(I,3) = FLOW(COL(I,3), ARRAY(I,3))
      COL(I,4) = FHI(COL(I,4), ARRAY(I,4))
      COL(I,5) = COL(I,5) + HPCT(I)
      COL(I,6) = COL(I,6) + GPCT(I)
   40 CONTINUE
C         COMPUTE REMAINING ROW STATISTICS
      FREQ = FLOATF(IHITS)
      RHPCT = FREQ / COUNT * 100.
      RGPCT = RSUM / SUMVR * 100.
      RMEAN = RSUM / FREQ
      RSTDDV = SQRTF(RSUMSQ / FREQ - RMEAN**2)
      RANGE = RHI - RLOW
C
C         NOW WRITE THE RESULTS
C
```

PROGRAM 6 (Continued)

```
      WRITE OUTPUT TAPE 10, 5010, (HPCT(I), JARRY(I,1), I = 1, 6),
     1      RHPCT, IHITS, RMEAN
      WRITE OUTPUT TAPE 10, 5020, IROW, (ARRAY(I,1), I = 1, 6), RSUM,
     1      RSTDDV
      WRITE OUTPUT TAPE 10, 5030, (JARRY(I,2), GPCT(I), I = 1, 6),
     1     MISSES, RGPCT, RANGE
      WRITE OUTPUT TAPE 10, 5040
      RETURN
5000  FORMAT (1H , 3X, 6(1HI, 14X), 1HI)
5010  FORMAT (1H , 3X, 7(2HI , F5.2, 3X, I4, 1X), 4HM = , F10.2)
5020  FORMAT (1H , I2, 1X, 7(1HI, F12.2, 2X), 4HS = , F10.2)
5030  FORMAT (1H , 3X, 7(2HI , I4, 3X, F5.2, 1X), 4HR = F10.2)
5040  FORMAT (1H , 3X, 7(1HI, 14X), / 1H , 3X,
     1   6(15HI--------------), 1HI)
      END
```

PROGRAM 7 BOTTOM

```
      SUBROUTINE BOTTOM(COL, ICOL)
C
      DIMENSION COL(6,6), ICOL(6,2), TOTAL(6,3)
C
      IFREQ = 0
      MISSES = 0
      SUMVR = 0.
      SUMSQ = 0.
      GHI = 0.
      GLOW = 0.
      GPCT = 100.
C
C         THIS LOOP COMPUTES COLUMN M, S, AND R AND GRAND STATISTICS
C
      DO 20 I = 1, 6
      FREQ = FLOATF(ICOL(I,1))
      TOTAL(I,1) = COL(I,1) / FREQ
      TOTAL(I,2) = SQRTF(COL(I,2)/FREQ - TOTAL(I,1)**2)
      TOTAL(I,3) = COL(I,4) - COL(I,3)
      IFREQ = IFREQ + ICOL(I,1)
      MISSES = MISSES + ICOL(I,2)
      SUMVR = SUMVR + COL(I,1)
      SUMSQ = SUMSQ + COL(I,2)
      GLOW = FLOW(GLOW,COL(I,3))
      GHI = FHI(GHI,COL(I,4))
   20 CONTINUE
      GMEAN = SUMVR / FLOATF(IFREQ)
      GSTDDV = SQRTF(SUMSQ/FLOATF(IFREQ) - GMEAN**2)
      GRANGE = GHI - GLOW
C
      WRITE OUTPUT TAPE 10, 5000, (COL(I,5), ICOL(I,1), I=1,6),
     1    GPCT, IFREQ
      WRITE OUTPUT TAPE 10, 5010, (COL(I,1), I = 1, 6), SUMVR
      WRITE OUTPUT TAPE 10, 5020, (ICOL(I,2), COL(I,6), I=1,6), MISSES,
     1    GPCT
      WRITE OUTPUT TAPE 10, 5030, (TOTAL(I,1), I = 1,6), GMEAN
      WRITE OUTPUT TAPE 10, 5040, (TOTAL(I,2), I = 1,6), GSTDDV
      WRITE OUTPUT TAPE 10, 5050, (TOTAL(I,3), I = 1,6), GRANGE
      RETURN
C
 5000 FORMAT (1H0, 5X, 6(F5.2, 3X, I4, 3X), 4X, F6.2, 3X, I4)
 5010 FORMAT (4X, 6(F13.2, 2X), 4X, F14.2)
 5020 FORMAT (1H , 5X, 6(I4, 3X, F5.2, 3X), 5X, I4, 2X, F6.2)
 5030 FORMAT (1H0, 4X, 6(4HM = , F10.2, 1X), 5X, 4HM = , F10.2)
 5040 FORMAT (1H , 3X, 6(5H S = , F10.2), 6X, 4HS = , F10.2)
C
 5050 FORMAT (1H , 3X, 6(5H R = , F10.2), 6X, 4HR = , F10.2)
      END
```